DIFFERENTIATED ONLINE/DIGITAL ACTIVITIES FOR ELEMENTARY CULTURALLY AND LINGUISTICALLY DIVERSE (CLD) STUDENTS BASED ON THE THEORY OF MULTIPLE INTELLIGENCES

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Abstract

Students come to the classrooms equipped with different needs, expectations, gifts, challenges, literacy and performance levels. Culturally and linguistically diverse (CLD) students are not the exception. Consequently, students' diverse needs require teachers to be aware and use their professional judgment and knowledge to properly respond to them in their teaching. Differentiated instruction (DI) has proven to be a useful approach in order to meet different students' needs. DI can be implemented from different areas such as content, procedure, product and learning environment. In the same way, the theory of Multiple Intelligences (MI) has been subject of research and has proven to offer an alternative educational approach at the time to provide teachers with a meaningful differentiation tool within the classroom. Additionally, digital online resources have become more and more popular each day. Virtual environments which were once optional and fashionable among students are now a necessity, since COVID-19 pandemics was declared back in March of this year, significantly affecting the educational sector. Therefore, this paper presents a series of digital online activities for CLD students based on the MI frame. It includes the design of a website containing surveys to create students' MI profile, resources including websites, videos, apps and LMSs sorted according to specific MI and sample lesson plans suggesting different ways in which those resources could be implemented and used in the classroom.

Dedication

I dedicate this thesis to my beautiful mother, whose example, inspiration and toughness have shaped my character, my spirits, and my soul. To my loved son, who has been my life's engine, my life partner and now my most helpful accomplice. To my family, who encouraged me to chase my dreams and accomplish my goals despite the distance.

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Chapter 1: Introduction

Over my almost 20 years of experience as an ESL teacher, I have had the good fortune to work with students from different populations, spanning a broad range of ages and socio-economic backgrounds and of varying English proficiency levels. However, it was three years ago when I came here to the United States for the first time that I was given the opportunity to truly appreciate the wide variety who gathered in a single elementary school building.

Along with the diverse range of students, I found myself with an important challenge; I had to participate as a permanent team member on a team of several homeroom teachers, each with their own pedagogical style, perception, and approach to teaching and learning. Guided by their best intentions (in most cases), these teachers continuously found themselves trying to cover lengthy curricula and designing common activities for the entire group of students. There were few opportunities for differentiation like small reading groups or work in stations taking place.

There is an extensive amount of research which has demonstrated that CLD students require differentiated instruction since their needs are very different. Herrera and Murry (2016), not only analyzed sociocultural, academic, cognitive and linguistic dimensions (which need to be considered as key elements with CLD students), but they also described different methods of instruction that must be considered or implemented in order to cope with the particular needs CLD students might have. Therefore, teachers are made accountable for curriculum instruction and pedagogical accommodations that address the needs of CLD students.

Tomlinson (2017) highlighted differentiation as “an alternative approach that proposes a classroom that honors and adapts to learner variation while building a ‘team of learners’ who work together to benefit outcomes for the group and each of its members and around a curriculum” (p. 13). In my opinion, this approach sounds more appropriate for classrooms with culturally and linguistically diverse students. However, unfortunately, there are still many teachers who are unfamiliar with how they can better serve the CLD students within their classes. As a result, many of those children end up being referred to special needs committees. In an interview Cristina Sanchez-Lopez, an Illinois Resource Center and Paridad Inc. teacher referred to the possible reasons why ELLs are both under- and over-identified for special education services (Colorín, Colorado, 2017). One of the reasons stated was that there were many places that did not have the resources needed or were learning about serving ELLs, so there were not enough services to address ELLs’ language needs. Sanchez (2017) also mentioned that as teachers wanted to get help for ELLs, and because special education was there, that seemed to be the first place where people went. The teacher also recognized that ELLs in their language developmental process did not necessarily need special education services but instead more broadened and improved English language learning services and culturally responsive programs (Colorín, Colorado, 2017).

When I was working on my monograph project which was required to complete licensure in Philology and Languages in Colombia, I had the opportunity to learn about the Theory of Multiple Intelligences (MI). In a completely revised and updated edition of his book *Multiple Intelligences,* Gardner (2006) noted that “human cognitive competence is better described in terms of a set of abilities, talents, or mental skills, which he called *intelligences*” (p. 6). I found this model to be an effective diagnostic tool and a meaningful way to plan differentiated activities to help meet CLD students' exceptional needs. Ultimately, "it is not how smart you are, but 'how' you are smart" (Gardner, 2011, p. 12).

Before the COVID-19 pandemic started, I had considered taking my elective classes (Online Pedagogy and Course Development and Technology-Supported Language Learning) and using them as the main tools to start a more independent career path online after my five-year contract in the United States ended. In light of current circumstances worldwide, honing skills in teaching via distance learning has become even more relevant. It is no longer an option. It is a necessity. I never imagined the impact that learning about online resources, websites, WebQuests, blogs, apps and LMS would have on my Master's program, nor how it would come to be so pertinent and applicable to the current education situation.

School districts across the United States are working hard to meet the many challenges this pandemic has brought. Winchester Public Schools, the district where I currently work, decided to combine science and social studies curricula to be taught through English language arts. While this strategy has its merits, this has added an extra stress to homeroom teachers' tasks as they attempt to plan in a differentiated way.

As I searched for the best way to serve the needs of my students within these new parameters, I came across the idea of creating differentiated digital/online activities for CLD students in the elementary classroom, based on the MI theory. My goal is to create a website that contains online MI diagnostic tools, descriptions of each of the multiple intelligences, and assessment activities that combine MI and specific apps, websites, and online resources. These resources could easily be used or adapted by different teachers to serve CLD students in both physical and online classrooms. The website is designed to be a helpful tool, a place where homeroom and ESL teachers will find practical tips to use in working with CLD students as well as a variety of formative and summative assessment tools and differentiated activities based on MI theory.

Both teachers and students will benefit from these activities. Online activities can be motivating and engaging for children in our current world. Regarding the English learning process specifically, Stanley (2013) stated that “technology can be a highly motivating and interactive tool, providing a source of real language, both written and spoken, in the classroom and motivating learners to produce more language than otherwise they might have done” (p. 2).

My goal is to use evidence to show how different intelligences can be enhanced in order to differentiate instruction for CLD students. I include four lesson plans, using WPS second grade as the grade model. It is my hope that the website can benefit, not only homeroom and ESL teachers from the WPS division, but also elementary ESL and content educators around the world who are currently searching for differentiated online alternatives to better serve CLD students. The MI frame offers a meaningful choice for teachers to get better acquainted with and accountable for the specific needs of CLD students. Ultimately, combining the MI frame with online activities can provide a meaningful and engaging connection to motivate and optimize the English learning process for all elementary children.

Chapter 2: Literary Review

For some time, education specialists and researchers have criticized the “one-size fits all” model where students are exposed to homogeneous teaching styles and evaluation methods, regardless of students’ abilities or interests. Ohanian (1999) stated that “A one-size-fits- all curriculum ends up fitting nobody” adding that “to accept the Standardistos’ lists and timetables is to accept a gloomy, stagnant, deterministic view of culture and of children” (p. 43). In a more contemporary article, Donohue (2015) compared schools with industrial factories in which teaching and learning practices had been somehow automatized and could no longer be relied upon.

In the case of CLD students its mere designation as culturally and linguistically diverse students, implied *diversity* per se in terms of culture and language in relation to their native English peers. Those differences have direct implications for the students. In particular, they entail large demands regarding sociocultural, cognitive, academic, and linguistic dimensions that the educational system needs to cope with.

Understanding CLD Students’ Reality in the Classroom

Herrera and Murry (2016) analyzed more in depth what cultural and linguistic diversity encompassed. This analysis included curriculum, pedagogy, instruction, and teachers’ role from the perspective of what students need versus what students receive. To begin with, CLD students are exposed to a variety of sociocultural challenges, such as having to adapt to a new country, to a new education system, and to the different nuances of the school's culture. In addition, sometimes CLD students need to deal with disrespect for first language, minority/majority cultures, and an emphasis on meritocracy and equality versus equity (p. 14).

Regarding cognitive dimension, there are also challenges that CLD students constantly face. Vasquez et al. (2014) referred to the Natural Order Hypothesis (Krashen, 1982), which stated that learners acquire parts of language in a predictable order (p. 14). When cognitive development in the students' first languages is interrupted and the students are exposed to cognitively demanding, decontextualized learning tasks, students end up in a frustrating experience rather than an effective learning one (Herrera & Murry, 2016). In the same way, CLD students encounter different challenges to communicate in a second language and to perform in cognitively demanding settings. Herrera and Murry (2016) explained how the framework developed by Cummins (1991) clearly illustrates some of those challenges. This framework highlights the impact of exposing CLD students to context-reduced versus context-embedded communicative situations. Comparatively, the framework also considers the implications of exposing CLD students to cognitively undemanding versus cognitively demanding communicative situations. The most challenging scenario for CLD students has to do with being exposed to content-reduced, cognitive demanding communicative situations.

From an academic perspective, CLD students have been confronted by numerous challenges. One such challenge has been a reductionist curriculum focused on high stakes assessments. Students also faced inadequate opportunities for classroom interactions. Additionally, they have had to deal with decontextualized and often standardized content-area assessments (Herrera & Murry, 2016, p. 46).

In terms of linguistic dimension, CLD students have encountered various challenges. One of these has been the lack of exposure to authentic, constructivist, and interactive learning environments. Another obstacle has been teachers who do not understand the time required for language development. The numbers of educators trained to provide meaningful language support has been negatively disproportionate to the need. Limited efforts toward curricular and instructional accommodations and modifications have adversely impacted CLD students. In like manner, a shortage of supplementary activities and limited exposure to authentic literacy activities have contributed to the watering down of the quality of instruction (Herrera & Murry, 2016, p. 66).

What is Differentiated Instruction?

In light of the challenges faced by CLD students and in consideration of their inherent and varied needs, differentiated instruction has been mentioned by several authors (Echevarria et al., 2004; Irujo, 2004; Tomlinson, 2005) as an alternative model to provide these students with access to the content and the skills of their grade level proficient peers. Students, whether attending the same school and the same classroom, come with individual interests, backgrounds, and literacy exposure levels. In the case of CLD students, they also arrive with unique cultural and language differences. Differentiated Instruction (DI) was initially developed as an alternative to meet the needs of specific populations, in particular, students identified as gifted and talented, students with special needs, and students with different sociocultural backgrounds (Irujo, 2004). More recently, Tomlinson (2017) affirmed that “at its most basic, level differentiated instruction means ‘shaking up’ what goes on in the classroom so that students have multiple options for taking information, making sense of ideas and expressing what they learn” (p. 1).

DI implies a comprehensive and committed work from teachers' perspectives. Tomlinson (2014) highlighted teachers' role in DI as crucial since they are responsible for providing students with specific alternatives to learn as quickly and deeply as possible. This could best be accomplished by not assuming identical roadmaps for everyone. In that way, students would be made aware of their errors and triumphs. As a result, the focus would be on results from hard and informed work rather than on meaningless scores (Tomlinson, 2014, p. 4). Considering the classroom setting itself, Tomlinson and Imbeau (2013) affirmed that "Differentiation can be accurately described as classroom practice with a balanced emphasis on individual students and course content" (p. 14). However, there have been several misunderstandings and misconceptions among educators regarding what DI is and is not.

Differentiated Instruction: Principles

Several authors (Tomlinson & Moon, 2013; Tomlinson, 2017; Doubet & Hockett, 2018) have tried to explicate what DI implies since the approach has brought strong misconceptions. One of the most common misinterpretations is to believe that whole class instruction is never used in DI. Some mistakenly believe that differentiation is being done by the mere fact of teachers responding to students' needs. Furthermore, DI has also believed as necessary only for low- and high-level students, or that its focus should be on students' readiness (Doubet & Hockett, 2018).

Tomlinson (2017) clarified that while DI is not just another way to provide homogeneous grouping, it is neither chaotic, individualized instruction, nor a way of tailoring the same suit of clothes" (p. 4). In other words, modifications in a DI classroom cannot be reduced to micro-differentiation strategies, such us letting the students volunteer to answer questions or letting students read or do homework if they finish a class assignment. In contrast, DI is a blend of whole class, group, and individual instruction. It is student-centered and proactive and is more qualitative than quantitative. DI is rooted in assessment and employs multiple approaches to content, process, and product and learning environment. Moreover, it also considers students' readiness, interests and learning profiles and a series of varied instructional (Tomlinson & Moon, 2013) as it is evidenced in Figure 1.

Figure 2.1

Differentiation Definition and its Components

Differentiation
teacher **proactive** response to learners' needs, shaped by **mindset**

Principles guiding differentiation

Learning support environment	Quality curriculum	Teaching-Learning informing assessment	Responsive instruction	Leading students and managing routines

Differentiation through

Content	**Process**	**Product**	**Environment**
Information and ideas	How students take in and manage information	How students evidence learning	Classroom climate or tone

Differentiation occurs according to students'

Readiness	**Interests**	**Learning profile**
Proximity to learning goal	Passions, affinities	Preferred learning approaches

Differentiation takes place through a set of strategies such us

•Learning/Interest Centers • Graphic Organizers • Scaffolded Reading/Writing Intelligence Preferences	• Tiered Assignments • Menus • Tic-Tac-Toe Complex Instruction	• Independent Projects • Expression Options • Small-Group Instruction

Note: Figure summarizing differentiation and its components. Adapted from Figure 1.1 *Key Elements of Effective Differentiated Instruction* by Tomlinson, C., and Moon, T. (2013) *Assessment and Student Success in a Differentiated Classroom*. Association for Supervision & Curriculum Development.ProQuest Ebook Central, http://ebookcentral.proquest.com/lib/greensboro-ebooks/detail.action?docID=1441532

By the same token, models like The Sheltered Instruction Observation Protocol (SIOP) “emphasize the instructional practices that are critical for second language learners as well as high-quality practice that benefit all students” (Echevarria et al., 2004, p.17). According to the authors, the protocol entails thirty main components grouped into eight main categories: Preparation, Building Background, Comprehensible Input, Strategies, Interaction, Practice/Application, Lesson Delivery and Review/Assessment. Preparation component examines the lesson planning process including language and content objectives that could be differentiated according to students’ language proficiency level, specific content, teaching-learning process, and product expected (Echevarria et al., 2004).

Differentiated Assessment

Differentiated assessment plays a remarkable role in meeting all students’ needs, and CLD students are no exception. Chapman and King (2012) defined Differentiated Assessment as “an ongoing process through which teachers gather data before, during, and after instruction using multiple formative and summative tools.” (p. 1). In a differentiated classroom, assessment may not necessarily take place at the end of a unit in order to know who understood or who did not. To the contrary, it is a constant process that allows teachers to plan, develop, and modify instruction to successfully meet students’ needs (Tomlinson, 2017).

Making decisions about how, what, and when students learn is a task that requires continuous observation more than assumption. As Chapman and King (2012) pointed out, "teachers gain knowledge of the students by noting correct, incorrect, appropriate or inappropriate responses" (p. 39). In the same manner, thinking, assessing, and analyzing gathered information to make adjustments to meet learners' performance levels is a process that not only takes time, but also requires the implementation of a series of formal and informal strategies (p. 39).

The Theory of Multiple Intelligences

In opposition to the concept of uniqueness, which had been attributed to the term "intelligence", since Alfred Binet and his development of an "IQ" test in 1904 (Armstrong, 2018), a new theory was developed. Howard Gardner, an American psychologist, revolutionized the concept in 1983. In his book *Frames of Mind,* Gardner (1983) suggested that human beings possess different intelligences or "abilities to solve problems, or to create products, that are valued within one or more cultural settings." (p.3). In a more contemporary and structured view, Gardner (1993) redefined again the concept of intelligence. This time, the author talked about intelligence as a "biopsychological potential" meaning that "all members of the species have the potential to exercise a set of intellectual faculties of which the species is capable" (Gardner, 1993, p. 36). In other words, when talking about an individual's linguistic or interpersonal intelligence for instance, the author specifically refers to the potential the individual has developed to deal with specific contents in his /her environment with little need for formal tutelage (Gardner, 1993). These intelligences rely on the linguistics signs heard or produced (linguistic) or the social/emotional information gleaned from interacting with other people (interpersonal) (Gardner, 1993, p. 37).

From an educational perspective, the Theory of Multiple Intelligences (MI) seemed to oppose the vision of a "uniform" or "one-size-fits all" school approach. In this vein, Gardner (1993) disagreed with the idea of uniform schools which affirmed "that there should be the same curriculum for all the students, the same methods of teaching and the same 'standardized' methods of assessment" (Gardner, 1993, p.69). Instead, the author insisted on the necessity of individual-centered education considering two main aspects. The first one was related to the evidence that has proven that the individuals have different minds and that "education ought to be responsive to those differences" (Gardner, 1993, p.71). The second argument had to do with the idea that in this modern world "no individual can master even a single body of knowledge, completely let alone the range of disciplines and competences. The period of Renaissance Man or Woman has long past" (Gardner, 1993, p.72). Consequently, Gardner (1993) asserted that once societies removed uniform schools, there were different models that "take seriously individual profiles of intelligence and seek to maximize the educational achievements of each person" (p. 72).

The eight intelligences.

Armstrong (2018) compiled at least eight criteria for an intelligence, highlighted by Gardner (1993). To begin with, the author mentioned potential isolation by brain damage, support by biometric findings, an identifiable core operation or sets of operations and an evolutionary history or plausibility (Armstrong, 2018, p.5). Similarly, Armstrong (2018) stated that the existence of savants, prodigies and other exceptional individuals and the susceptibility to be encoded in a symbol system are also determining factors related to the concept of intelligence. Finally, the author pointed out "a distinctive developmental history and a definable set of expert end-state performances and support from experimental psychological tasks as crucial factors to convey a specific intelligence (Armstrong, 2018, p. 5). In his book *Frame of Minds*, Gardner (1983) proposed the existence of at least seven different intelligences. More recently, the author has included an eighth intelligence and he has also considered the possibility of a ninth (Gardner, 1999).

Linguistic intelligence has to do with the ability to effectively use words in oral and written ways (Armstrong, 2018). It implies the capacity to manipulate the syntax, the phonology, the semantics and the pragmatic dimensions or practical usages of the language (Armstrong, 2018). Examples of activities related to linguistic intelligence are lectures, discussions, storytelling, choral reading, and journal writing (Chapman & King, 2012). Alternatively, Logical-mathematical intelligence, involves the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically (Gardner, 2000). According to Mackenzie (2012), students with a developed logical intelligence seek order, reason scientifically, and enjoy testing theories. They also like completing puzzles, analyze abstract ideas and some even perform operations at a rapid rate.

By the same token, Spatial intelligence implies the ability to perceive the spatial world accurately and to perform transformations upon those perceptions (Armstrong, 2018, p. 3). It involves the capacity to visualize and includes a sensitivity to color, shape, line, form space and the relation between those elements (Armstrong, 2018, p. 3). Some activities within this intelligence include graphs, art activities, representation games, optical illusions, and photography (Chapman & King, 2012). Equally important, Bodily-kinesthetic intelligence is related to the capacity to use the body to express ideas and feelings (Armstrong, 2018). It includes specifical physical skills like coordination, balance, and flexibility. Furthermore, it entails dexterity, strength, and tactile abilities (Armstrong, 2018, p. 3). Students with developed bodily/kinesthetic intelligence prefer activities that involve manipulatives, miming and hands on experiences. Dramatic interpretations, participation in sports, movement routines and role-plating are also a part of this inventory (Chapman & King, 2012).

In turn, Musical intelligence presupposes the capacity to perceive, transform, express, and discriminate among musical forms (Armstrong, 2018). It includes sensitivity to the rhythm and pitch or melody and to the timbre and tone color of a musical piece as well (Armstrong, 2018, p. 3). Activities related to this intelligence include singing, creating rap songs, using musical instruments, audio recordings and other audio materials such audio music collections (Chapman & King, 2012).

When talking about Interpersonal intelligence, it is related to the ability to notice and make distinctions among other individuals' moods, temperaments, motivations, and intentions (Gardner, 1983). It includes sensitivity to facial expressions and gestures. It also entails the capacity to discriminate among different interpersonal cues and the ability to respond to them in an effective way (Armstrong, 2018). Interpersonal activities in the classroom include board games, discussions, debates, working collaboratively, and social media, among others (Chapman & King, 2012). Conversely, Intrapersonal intelligence, refers to the capacity "to access to one's feeling life" (Gardner, 1983). "It entails self-knowledge and the capability to act adaptively on the basis of that knowledge" (Armstrong, 2018, p.3). Activities related to this intelligence include using self-checking materials, personal journals, and materials or equipment for project-based learning (Chapman & King, 2012).

Finally, Gardner (1999) referred to Naturalistic intelligence as the ability to relate to natural surroundings. “This particular intelligence involves how sensitive an entity is to nature and the world. People who surpass in this intelligence are cordially interested in growing plants, taking care of animals, or studying about animals and plants” (Sheoran et al., 2019). Naturalistic activities entail playing with pets, gardening, investigating nature, raising animals, and caring for the planet earth (Chapman & King, 2012).

MI in the classroom.

The MI frame has been adapted and implemented as a pedagogical approach to differentiate, deliver, and assess instruction in the classroom. Chapman and King (2012) included it as part of a repertoire of assessment tools that allow teachers to complete learners’ profiles, analyzing the specific ways students approach, engage and demonstrate learning. These authors recommend that teachers “use that information to provide lessons and assessments that allow each student to achieve success” (Chapman & King, 2012, p. 42). Likewise, the MI frame has also been considered as a meaningful way to consciously provide learning experiences beyond the most frequently used verbal and logical intelligences. Gregory and Chapman (2002) have suggested “Kidwatching” and “How are you intelligent?” as powerful strategies to collect information on students’ MI profiles (p. 29). While the former suggested the use of checklists and questionnaires, the latter incorporated a series of questions students can formulate and answer themselves to increase self-awareness and identify areas of strength. Armstrong (2018) included equivalent terminology to refer to each intelligence in order “reflect more clearly and directly” their essential nature. Some examples are provided in Figure 2. and Figure2.1

Figure 2.2

Intelligences and Sample Self-Awareness Statements

Linguistic Intelligence (Word Smart)	Logical-mathematical Intelligence Number/Logic Smart	Spatial Intelligence (Picture smart)	Bodily Kinesthetic Intelligence (Body Smart)
I enjoy word games.	I enjoy puzzles and brainteasers.	I can see clear visual images when I close my eyes.	I am well coordinated.
Books are important to me.	I like to do scientific experiments.	I like to draw and doodle.	I like to practice sports.
I often listen to the radio, tapes, CDs.	I like using logic to solve problems	I like books with pictures and maps.	I touch things to learn more about them.
I write easily, and I enjoy it.	I enjoy math and using computers.	I have vivid dreams at night.	I enjoy hands-on activities.
I enjoy telling jokes.	II can easily do math operations in my head.	I like videos, movies, and photographs.	I prefer doing rather than watching.
Musical Intelligence (Music Smart)	**Interpersonal Intelligence (People Smart)**	**Intrapersonal Intelligence (Self Smart))**	**Naturalistic Intelligence (Nature Smart)**
I enjoy singing.	I enjoy sharing with my peers.	I enjoy hobbies by myself.	I enjoy talking about my own pet and other people' pets.
I play at least one musical instrument.	I feel comfortable in a crowd.	I prefer to work alone.	I enjoy field trips to appreciate nature
I have a good sense of rhythm.	I prefer to work in group.	I like to learn more about myself.	I enjoy taking care of plants and animals.
I enjoy listening to music while studying.	I prefer to work in group.	I have confidence in myself.	I like to classify things into categories
I can remember tunes.	My partners ask me for advice.	I learn from my own mistakes.	I enjoy outdoors.

Note: Figure summarizing differentiation and its components. Adapted from Figure 2.5 *How Are You Intelligent?* by Gregory, G., & Chapman, C. (2002). *Differentiated instructional strategies. one size doesn't fit all* (p.30) Corwin. Adapted from Figure 3.2 *MI Inventory for Students* by Armstrong, T (2018). *Multiple Intelligences in the classroom.* (4th ed.) (p 30-34). ASCD.

However, MI frame has not only been proposed as a powerful tool to complete students' profiles in terms of "proclivities" (Gardner, 1983) or students' inclinations towards certain intelligences. Armstrong (2018) proposed MI frame as an alternative educational model that has represented foundational basis for other teaching-learning approaches. Collaborative learning seems to be based on People Smart (intrapersonal intelligence), involving students in activities regarding other intelligences as well (Armstrong, 2018, p. 54). In the same way, specialists in MI have considered within the frame, a series of effective teaching strategies going beyond traditional model classrooms and even specific ways to create MI lesson plans under have been developed (Campbell, 2007; Arnold, 2007; Baum et al., 2005). Similarly, MI has also provided a great contribution to authentic differentiated assessment by suggesting multiple ways to evaluate students (Armstrong, 2018). Presently, MI frame has also been analyzed in the light of new technologies.

Technology in English Language-Teaching Process

Technology has modified the way people operate in different fields of society and education has not been detached from that reality. McCoog (2007) affirmed that "Our world has become digital, and our classrooms are steadily following suit. The teacher remains the focal point, but new resources are adapting how instruction occurs" (p. 1). In terms of language learning, different models such as Computer Assisted Language Learning (CALL) have appeared. CALL was a concept initially defined by Levy (1997) as "the search for and study of applications of the computer in language teaching and learning" (p. 1). Subsequently, Beatty (2003) added a change in the nature of CALLA model affirming that it entailed "any process in which a learner uses a computer and, as a result, improves his or her language" (p. 7), encompassing “different materials design, technologies, pedagogical theories and modes of instruction (Beatty, 2003, pp. 7-8).

Moreover, after the sudden outbreak of a deadly disease called Covid-19 caused by a Corona Virus (SARS-CoV-2) shook the entire world, in-person education was also highly impacted. Online instruction and the use of technological tools was even more neuralgic and urgent. The World Health Organization declared it as a *pandemic*. As a result, this situation challenged the education system across the world and forced educators to shift to an online mode of teaching overnight (Dhawan, 2020). In search for effective ways to instruct CLD distant learners, English as a second language (ESL) teachers have constantly looked for adequate tools that allow them to maintain an active teaching-learning process. In that search, differentiation has been a primordial aspect to be considered.

Digital tools to differentiate instruction for CDL students.

Stanley (2013) compiled a series of activities regarding teaching English as a second language process, organized according to language skills (listening, speaking, reading and writing), and language areas of grammar, pronunciation, and vocabulary. The author also considered teaching activities for a varied range of English learning levels from beginners to advanced students, incorporating a series of up-to-date tools such as mobile technologies, social networking, and suggesting software/websites for the activities featured (Stanley, 2013). Knudson (2020) suggested a series of technological tools to support the teaching learning process of CLD students according to their proficiency level. Websites such as Khan Academy, BrainPOP ELL, Storytelling, Shadow Puppet Edu, Read & Write, Ellevation and Explain Everything appear among the recommended ones (Knudson, 2020).

Finally, based on Armstrong (2018) and his proposal of a series of technological tools under the frame of MI in order to differentiate instruction in the classroom and diverse tools suggested by WIDA regarding specifically CLD students, there are multiple resources which can be listed as shown in Figure 3.

Figure 2.3a

MI Differentiated Technological Sample Tools for Online CLD Students

Linguistic Intelligence (Word Smart)	- Microsoft Word - Google Docs - Dragon Naturally Speaking - Immersive Reading - Read&Write - Google Translate - Readworks - Padlet
Logical-mathematical Intelligence (Number/Logic Smart)	- Edpuzzle - Tynker - Khan Academy - Monster Math - Rubik's App - Google Jamboard - Dreambox
Spatial Intelligence (Picture Smart)	-Pixton -Buncee -Piktochart - Adobe spark - Google Drawing -Canva -Padlet
Musical Intelligence (Music Word Smart)	- Youtube - Lyrster - Super Simple - Screencastify - Bussongs.com - Kiddiddles.com - Cullen's ABC

Note: Figure listing differs online resources to differentiate ESL online instruction. Adapted from Figure 13.1 *Resources for Integrating New Learning Technologies* by Armstrong, T. (2018). *Multiple Intelligences in the classroom.* ASCD. WIDA (2020) *Teaching multilingual* *earners online*. Retrieved from https://wida.wisc.edu/memberships/isc/newsletter/teaching-multilingual-learners-online. Sanchez, S, (2016) 11 websites for children to learn English by singing. *American TESOL Institute*. Retrieved from https://americantesol.com/blogger/chantingsingingyls/

Figure 2.3b (continued)

MI Differentiated Technological Sample Tools for Online CLD Students

Bodily-Kinesthetic Intelligence Body Smart)	- Flipgrid - Seesaw - Screencastify - Gonoodle - KIDZBOP Dance Along Videos
Interpersonal Intelligence (People Smart)	- Family tree members - Interactive Google Slides - Zoom/Google Meet (Breakrooms) - Canvas - Skype - Kahoot
Intrapersonal Intelligence (Self Smart)	- Imagine Learning - Manythings.org - ESL Videos - LearnEnglish Kids - English Interactive
Naturalistic Intelligence (Nature Smart)	-Google Expeditions -Tour Creation -Within -National Geographic - Discovery Kids

Note: Figure listing differs online resources to differentiate ESL online instruction. Adapted from Figure 13.1 *Resources for Integrating New Learning Technologies* by Armstrong, T. (2018). *Multiple Intelligences in the classroom.* ASCD. WIDA (2020) *Teaching multilingual earners online*. Retrieved from https://wida.wisc.edu/memberships/isc/newsletter/teaching-multilingual-learners-online. Sanchez, S, (2016) 11 websites for children to learn English by singing. *American TESOL Institute*. Retrieved from https://americantesol.com/blogger/chantingsingingyls/

Conclusion

To conclude, differences between uniform one-size fits all models versus differentiated models of instruction like the ones stated by Tomlinson (2017), Doubet and Hockett (2018) or the SIOP model highlighted by Echevarria et al. (2004) are more than evident. DI models from its origins were proposed to meet needs of diverse populations, including students with special needs and students with different socio-cultural and economic backgrounds (Irujo, 2004). Under that perspective, DI models have been considered as meaningful and suitable for CLD students regarding their specific and varied language needs (Herrera & Murry, 2016). In like manner, the Multiple Intelligences frame also appears as a significant tool to differentiate instruction within the classroom (Armstrong, 2018; Chapman & King 2012). Multiple Intelligence theory proposes the existence of at least eight intelligences or biopsychological potentials (Gardner, 1993), the teacher's role at the time of designing lesson plans, learning strategies, and differentiated assessments with students' least and most developed intelligences in mind is crucial (Armstrong, 2018). Finally, there is an urgent necessity of using technology with specific purposes within the classroom as an instrument that allows teachers to access and facilitate students learning processes. With this in mind, my purpose is to create a website that integrates MI frame with digital tools such as websites and applications that allow teachers to differentiate instruction while teaching remotely. Particular strategies, lesson plan components and the whole project rationale and design in general will be discussed in further chapter.

Chapter 3: Project Design

In this chapter, I intend to explain the rationale behind creating a website for CLD students with a series of online resources and lesson plans containing differentiated digital activities, based on the theory of Multiple Intelligences, in order to enhance students' English learning process. The website will also constitute a meaningful tool for ESL and content teachers, providing ideas and examples for integrating technological resources and online activities through the provision of differentiated lesson plans which adhere to integrated-curriculum demands. Teachers, parents and students will find various resources related to Multiple Intelligences (MI), including MI inventories and surveys, videos, and presentations regarding MI theory and its importance and usefulness when instructing CLD students. Additionally, the website includes sample lesson plans based on the standards of learning stated in the grade level curricula. Lesson plans include differentiated alternative options to accommodate students' proficiency levels and MIs.

Why Use MI as a Differentiating Component to Instruct CLD Students?

CLD students represent a permanent challenge for content teachers who are in constant search of varied and meaningful resources to meet CLD students' specific needs. Herrera and Murry (2016) have illustrated in detail the challenges that CLD students face within the educational system and have also suggested specific models based on differentiated instruction as an alternative approach to coping with those specific needs. Tomlinson (2017) referred to differentiation in the classroom as "a way to provide students with multiple options for taking information, making sense of ideas and expressing what they learn" (p. 1).

Originally, the MI theory was created based on a more inclusive and expanded concept of intelligence as a set of "abilities to solve problems, or to create products, that are valued within one or more cultural settings" (Gardner, 1983). Subsequently, Gardner and his group of collaborators from Harvard University (Gardner, 1998) suggested that educational titles and academic achievements are not a decisive factor at the time of determining an individual's degree of intelligence as intelligence is not a unique concept. Instead, Gardner (1999) identified eight types of intelligences comprising linguistic; musical; logical-mathematical; visual-spatial; bodily kinesthetic; interpersonal; intrapersonal; and naturalistic.

This innovative view, contained within the MI frame, attracted attention beyond the psychologists' community. Different specialists in the educational field (Armstrong, 2018; MacKenzie, 2012) turned their attention towards the model, trying to create instruments to identify, measure and enhance multiple intelligences that appear weaker in students to boost their learning. While Tomlinson (2017) indicated the possibility to differentiate instruction through content, process, product, and learning environment, Armstrong (2018) has also highlighted the possibility to consider MI intelligences as an instructional model which can be applied within different perspectives. In terms of content, teachers can easily group students in centers according to specific topics targeting different MIs. Regarding process, Gardner (2006) stated that when students are exposed to content material in more than one way, they are given more exposure to the material, thus they have more opportunities from multiple approaches in which to learn the content (p. 23). Additionally, "using MI in the classroom makes lessons more interesting, which causes students to pay more attention to what is taught and then learned. As a result, students are more engaged, they remember more, and achievement increases" (Lazear 2004 as cited in Gangi, 2011). In terms of product, Chapman and King (2012) have considered the MI frame as meaningful model for differentiated assessment in the classroom. The MI frame offers a variety of activities that can be developed by students in order to either strengthen those intelligences that are not prominent or even to boost their intelligences proclivities (Armstrong, 2018). As a result, students can give account of what they have learned utilizing a diverse range of activities targeting their MIs as well as their English proficient levels.

Why Design Activities to Support CLD Students Online?

It is not a secret that this modern, changing world has brought with it new technologies, encompassing very advanced technological devices, specific software and hardware, websites, applications, and social networks. This ever expanding and diverse digital world is now integrated into our daily lives and multiplies and constantly updates in an exponential way. Education has also been greatly impacted by new technologies which have contributed to the enhancement of learning. Every day countless of websites, blogs, LMS, digital activities emerge to facilitate the CLD English teaching-learning process.

Considering the six principles for exemplary teaching of English learners, TESOL International Association Writing Team (2018) commented on the importance of providing and enhancing input through varied approaches, techniques, and modalities (p. 45). By the same token, the authors also pointed out the need of creating conditions that promote an emotionally positive and organized classroom (TESOL International Association Writing Team, 2018, p. 40). After the outbreak of COVID-19 caused by a severe acute respiratory syndrome Corona Virus 2 (SARS-CoV-2) and its tremendously negative impact on in-person instructions, teachers have been obliged to constantly search for new methods that allow them to properly support their students. As a result, today more than ever, it is imperative to design and create online strategies and tools that enable and enhance remote teaching-learning processes.

A Website: A Meaningful User-friendly Tool

Even before the onset of the global pandemics I had contemplated using the knowledge I would gain through this master's degree program to enhance CDL students' English teaching-learning process online. With this goal in mind, I selected ENG 6530 Online Pedagogy and Course Development and ENG 6540: Technology-Supported Language Learning as elective courses. Through completing my coursework in those classes, I realized how powerful and necessary is to create and design teaching instructional digital tools. I also discovered multiple educational applications, websites, LMS, blogs, videos, and many other digital tools that were previously designed by specialists in CLD education to facilitate remote teaching-learning process.

Having been given the opportunity to learn how to design and create my own website, I could better understand its benefits. In this particular case, a well-designed website allows CLD students access different lesson plans and digital educational resources based on the theory of Multiple Intelligences. This differentiated format will thus foster the English learning process. The website combines a user-friendly design giving students, parents and teachers easy access to different sections. Sections include videos and resources related to multiple intelligences. A specific teacher section incorporates MI surveys, inventories, online tools classified according to MI (along with suggestions for how to use them) and several video examples. Lesson plans can be found in this section. As their main goal is to provide models as a useful guide for teachers, lesson plans are designed for second and third grades, and their components are based on the SIOP model. Lesson plans also include accommodations and modifications regarding students' proficiency levels and MIs. The section designated for students includes MI interactive surveys, explanatory videos related to ways of using different online educational applications and apps, and charts suggesting different English learning activities based on MI. Everyone has the right to learn even under these unprecedent circumstances of a global pandemics. It is imperative that teachers continue to work every day to make learning possible for all students, and this website's purpose is to provide a tool to assist teachers with this challenge

Chapter 4: The Project

The present project entails the design of an educational website aimed to support teachers and students providing a series of differentiated online digital resources based on the theory of Multiple Intelligences (MI). The website introduces differentiated instruction justifying its implementation with culturally and linguistically diverse students along with the four main areas in which differentiation could be executed. By the same token, this website outlines MIs by including the author's definitions of intelligence, a brief explanation of each one and typical activities proper from each intelligence. MI inventories, mentioned as fundamental tools to create initial students' MI profiles by different authors (Armstrong, 2018; Gregory & Chapman 2002), also have a main role in this website. Likewise, this website introduces a series of online digital resources including educational websites, videos, functional collaborative apps, graphic organizers and extensions sorted out according to MI frame offering teachers and students an extensive variety of tools to be utilized during and after school times. Finally, the website provides a collection of four lesson plans for elementary classroom instruction in which MI main role appears in terms of independent practice strategies and assessment activities. Lesson plans offer sample activities regarding the eight MIs but teachers can select some according to their own judgement criteria such as the emphasis of the lesson or the MIs profiles present in the classroom.

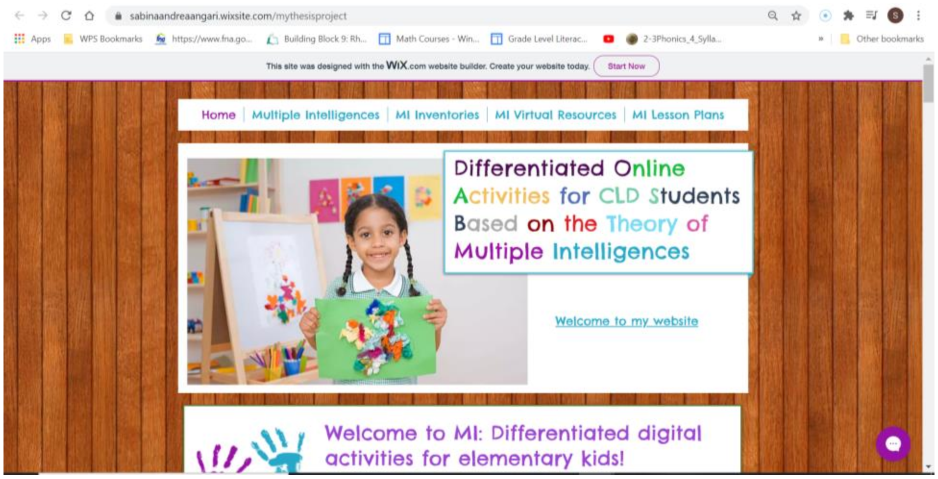
The name of the website is Differentiated Online Digital Resources for CLD students based on the theory of Multiple Intelligences. The website can be accessed at the URL https://sabinaandreaangari.wixsite.com/mythesisproject

Section 1: Home

In the initial screen view, it could be observed the title of the project, a short explanation of the purpose of the website in English and in Spanish and some brief considerations clarifying why differentiation instruction is a recommended model. Additionally, there is a video explaining in more detail differentiation in the classroom and examples to implement it. Finally, there are some considerations regarding how Multiple Intelligences (MI) represents an instructional model that enables and allows differentiation in the classroom in different areas as it is observed in Figures 4.1, 4.2, 4.3, 4.4, and 4.5.

Figure 4.1

Home Page



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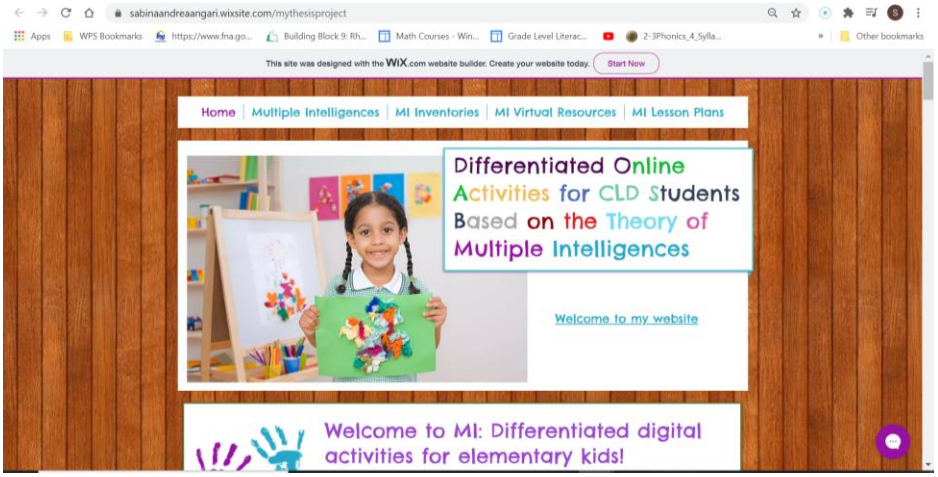
Differentiated Online Activities for CLD Students Based on the Theory of Multiple Intelligences

Welcome to MI: Differentiated digital activities for elementary kids!

Note: Screenshot of Home Page

Figure 4.2

Home Page



Differentiated Online Activities for CLD Students Based on the Theory of Multiple Intelligences

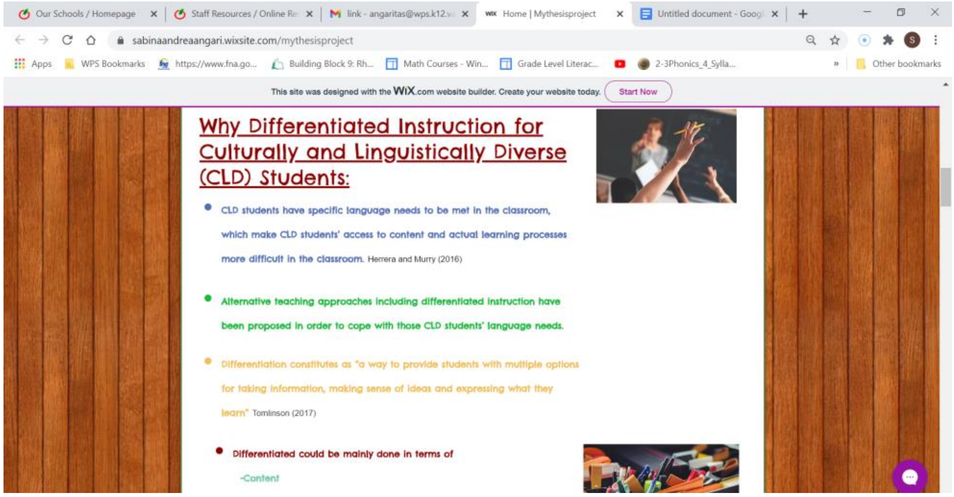
Welcome to my website

Welcome to MI: Differentiated digital activities for elementary kids!

Note: Screenshot of Home Page

Figure 4.3

Why Differentiated Instruction for Culturally and Linguistically Diverse (CLD) students?


Our Schools / Homepage
Staff Resources / Online Re
link - angaritas@wps.k12.v
Home | Mythesisproject
Untitled document - Googl
sabinaandreaangari.wixsite.com/mythesisproject
Apps
WPS Bookmarks
https://www.fna.go...
Building Block 9: Rh...
Math Courses - Win...
Grade Level Literac...
2-3Phonics_4_Sylla...
Other bookmarks
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Start Now

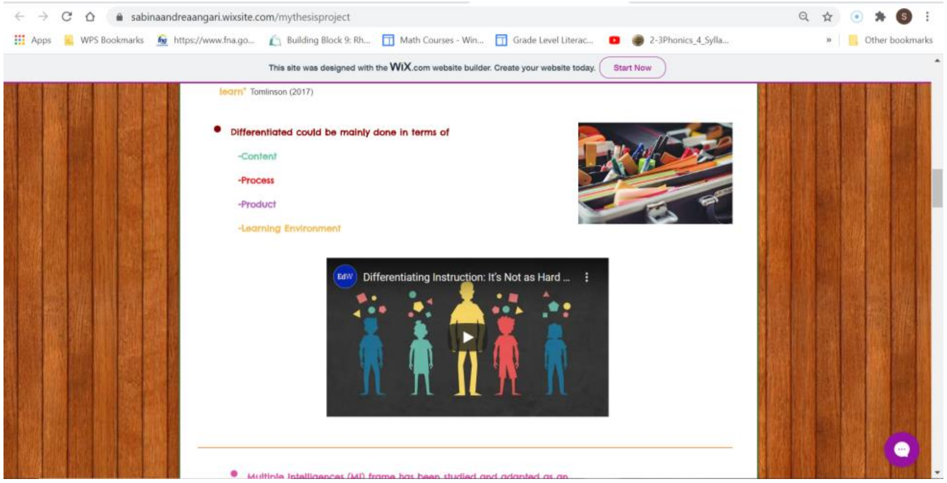
Why Differentiated Instruction for Culturally and Linguistically Diverse (CLD) Students:

- CLD students have specific language needs to be met in the classroom, which make CLD students' access to content and actual learning processes more difficult in the classroom. Herrera and Murry (2016)
- Alternative teaching approaches including differentiated instruction have been proposed in order to cope with those CLD students' language needs.
- Differentiation constitutes as "a way to provide students with multiple options for taking information, making sense of ideas and expressing what they learn" Tomlinson (2017)
- Differentiated could be mainly done in terms of
  -Content

Note: Screenshot from Homepage

Figure 4.4

Video: Differentiation Instruction: It’s Not as Hard as You Think


sabinaandreaangari.wixsite.com/mythesisproject
Apps
WPS Bookmarks
https://www.fna.go...
Building Block 9: Rh...
Math Courses - Win...
Grade Level Literac...
2-3Phonics_4_Sylla...
Other bookmarks
This site was designed with the WiX.com website builder. Create your website today.
Start Now
EdW
Differentiating Instruction: It's Not as Hard ...

learn" Tomlinson (2017)

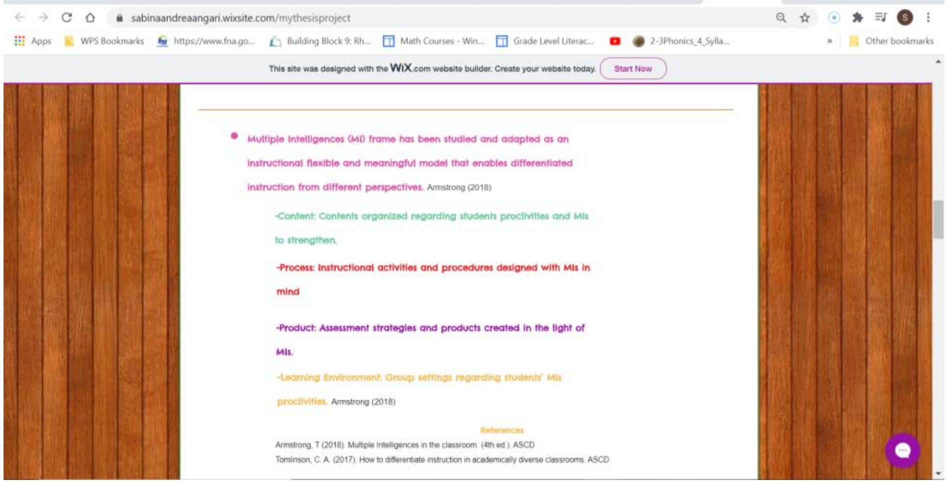
- Differentiated could be mainly done in terms of
  - -Content
  - -Process
  - -Product
  - -Learning Environment

- Multiple Intelligences (MI) frame has been studied and adapted as an

Note: Screenshot from Homepage

Figure 4.5

Introduction



- Multiple Intelligences (MI) frame has been studied and adapted as an instructional flexible and meaningful model that enables differentiated instruction from different perspectives. Armstrong (2018)
  - -Content: Contents organized regarding students proclivities and MIs to strengthen.
  - -Process: Instructional activities and procedures designed with MIs in mind
  - -Product: Assessment strategies and products created in the light of MIs.
  - -Learning Environment: Group settings regarding students' MIs proclivities. Armstrong (2018)

References

Armstrong, T (2018). Multiple Intelligences in the classroom. (4th ed.). ASCD

Tomlinson, C. A. (2017). How to differentiate instruction in academically diverse classrooms. ASCD

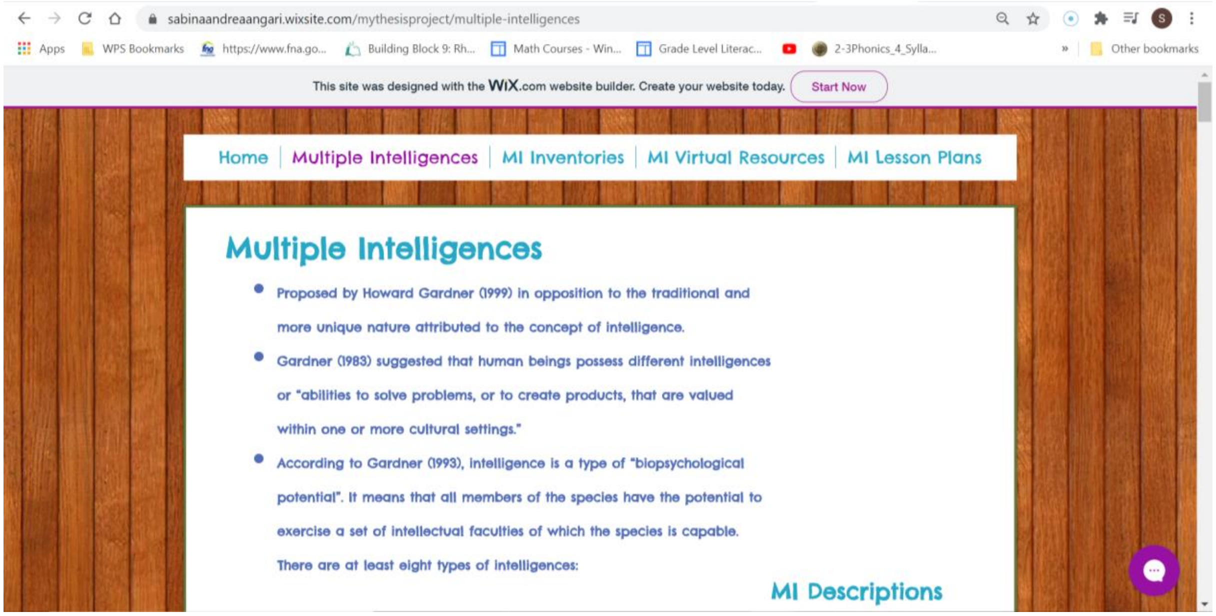
Note: Screenshot from Homepage

Section 2: Multiple Intelligences

In the link named Multiple Intelligences there are some considerations explaining first definitions of intelligence from the theory's author, an explanatory video of MI's and differentiated instruction as it is shown in Figure 4.6 and Figure 4.7.

Figure 4.6

Multiple Intelligences



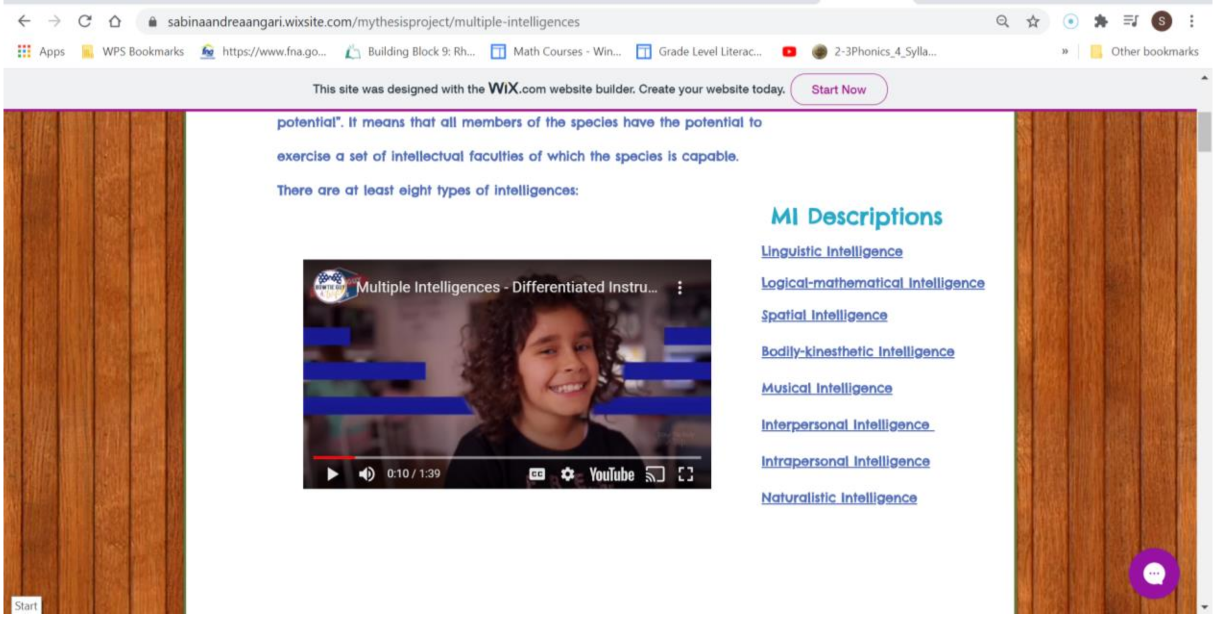
Multiple Intelligences

- Proposed by Howard Gardner (1999) in opposition to the traditional and more unique nature attributed to the concept of intelligence.
- Gardner (1983) suggested that human beings possess different intelligences or "abilities to solve problems, or to create products, that are valued within one or more cultural settings."
- According to Gardner (1993), intelligence is a type of "biopsychological potential". It means that all members of the species have the potential to exercise a set of intellectual faculties of which the species is capable. There are at least eight types of intelligences:

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.7

Video: Multiple Intelligences - Differentiated Instruction - Learning Styles



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potential". It means that all members of the species have the potential to exercise a set of intellectual faculties of which the species is capable.

There are at least eight types of intelligences:

MI Descriptions

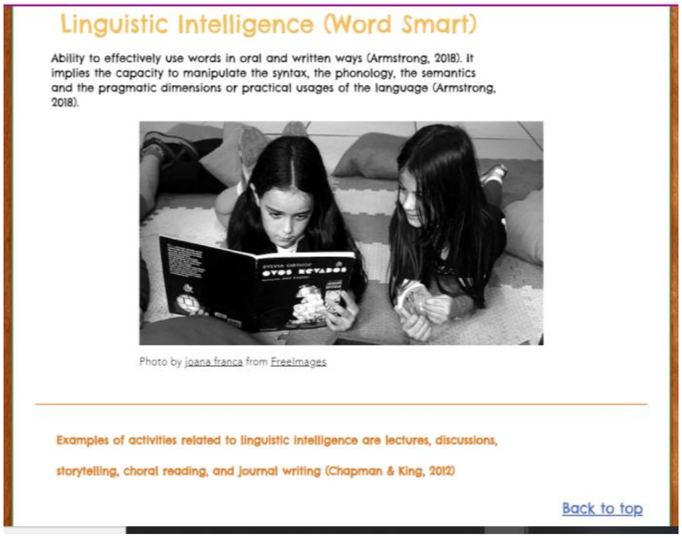
- Linguistic Intelligence
- Logical-mathematical Intelligence
- Spatial Intelligence
- Bodily-kinesthetic Intelligence
- Musical Intelligence
- Interpersonal Intelligence
- Intrapersonal Intelligence
- Naturalistic Intelligence

Note: Screenshot of the screen view Multiple Intelligences link

In this link, there is also a brief descriptions of the eight MIs namely Linguistic, Logical-mathematical, Spatial, Bodily-kinesthetic, Musical, Interpersonal, Intrapersonal and naturalistic. Each description entails the kind of ability, pictures related and the types of classroom activities proper from each intelligences. (See Figures 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.14, and 4.15).

Figure 4.8

Linguistic Intelligence



Linguistic Intelligence (Word Smart)

Ability to effectively use words in oral and written ways (Armstrong, 2018). It implies the capacity to manipulate the syntax, the phonology, the semantics and the pragmatic dimensions or practical usages of the language (Armstrong, 2018).

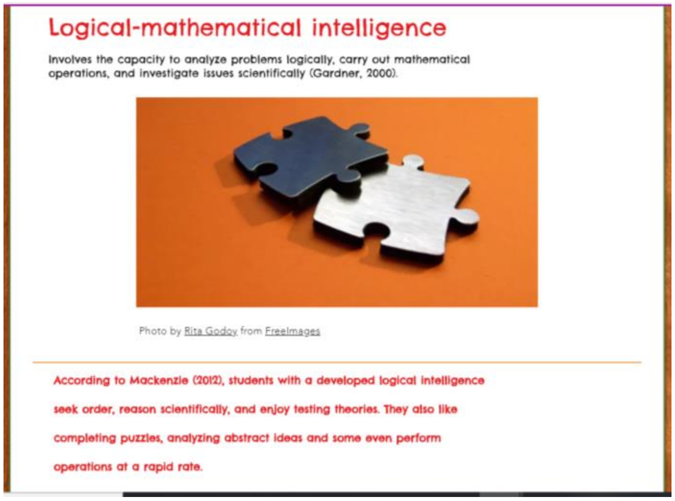
Photo by joana franca from FreeImages

Examples of activities related to linguistic intelligence are lectures, discussions, storytelling, choral reading, and journal writing (Chapman & King, 2012)

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.9

Logical-Mathematical Intelligence



Logical-mathematical intelligence

Involves the capacity to analyze problems logically, carry out mathematical operations, and investigate issues scientifically (Gardner, 2000).

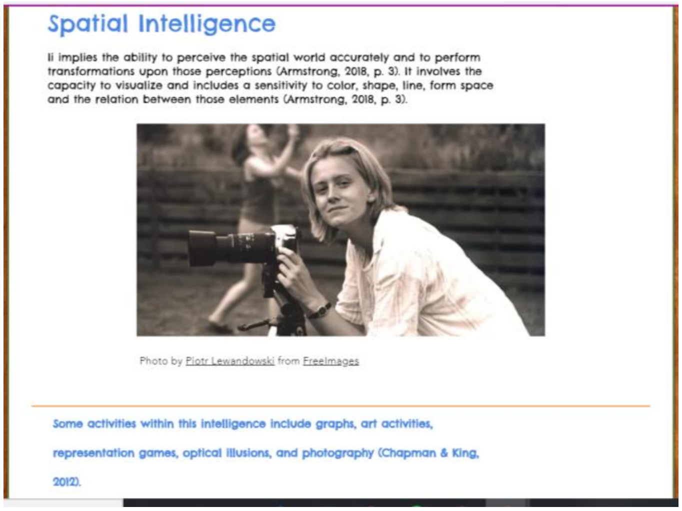
Photo by Rita Godoy from FreeImages

According to Mackenzie (2012), students with a developed logical intelligence seek order, reason scientifically, and enjoy testing theories. They also like completing puzzles, analyzing abstract ideas and some even perform operations at a rapid rate.

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.10

Spatial Intelligence



Spatial Intelligence

Ii implies the ability to perceive the spatial world accurately and to perform transformations upon those perceptions (Armstrong, 2018, p. 3). It involves the capacity to visualize and includes a sensitivity to color, shape, line, form space and the relation between those elements (Armstrong, 2018, p. 3).

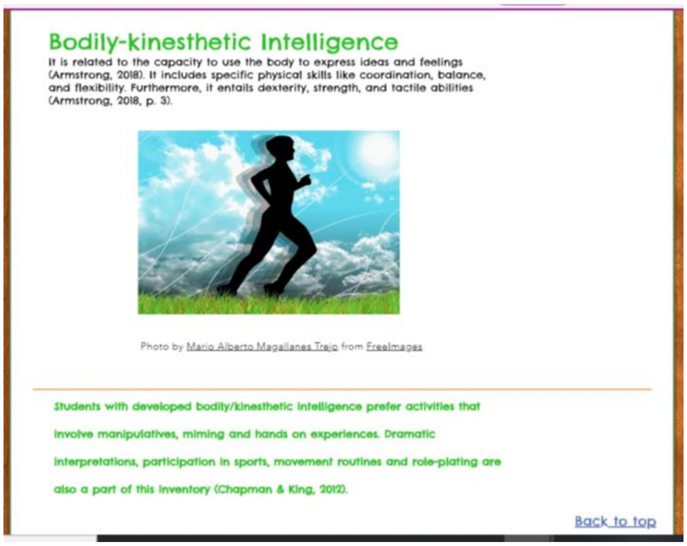
Photo by Piotr Lewandowski from FreeImages

Some activities within this intelligence include graphs, art activities, representation games, optical illusions, and photography (Chapman & King, 2012).

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.11

Bodily-kinesthetic Intelligence



Bodily-kinesthetic Intelligence

It is related to the capacity to use the body to express ideas and feelings (Armstrong, 2018). It includes specific physical skills like coordination, balance, and flexibility. Furthermore, it entails dexterity, strength, and tactile abilities (Armstrong, 2018, p. 3).

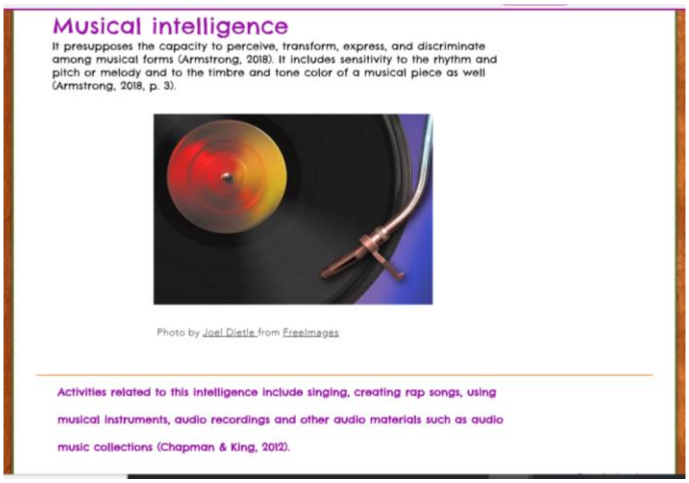
Photo by Mario Alberto Magallanes Trejo from FreeImages

Students with developed bodily/kinesthetic intelligence prefer activities that involve manipulatives, miming and hands on experiences. Dramatic interpretations, participation in sports, movement routines and role-plating are also a part of this inventory (Chapman & King, 2012).

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.12

Musical Intelligence



Musical intelligence

It presupposes the capacity to perceive, transform, express, and discriminate among musical forms (Armstrong, 2018). It includes sensitivity to the rhythm and pitch or melody and to the timbre and tone color of a musical piece as well (Armstrong, 2018, p. 3).

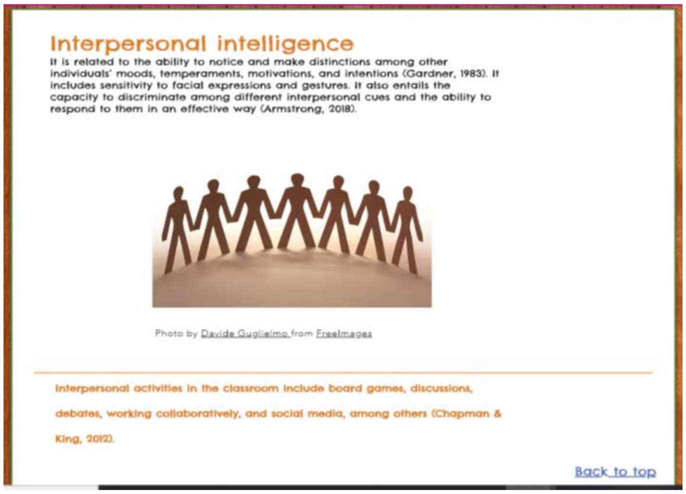
Photo by Joel Dietle from FreeImages

Activities related to this intelligence include singing, creating rap songs, using musical instruments, audio recordings and other audio materials such as audio music collections (Chapman & King, 2012).

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.13

Interpersonal Intelligence



Interpersonal intelligence

It is related to the ability to notice and make distinctions among other individuals' moods, temperaments, motivations, and intentions (Gardner, 1983). It includes sensitivity to facial expressions and gestures. It also entails the capacity to discriminate among different interpersonal cues and the ability to respond to them in an effective way (Armstrong, 2018).

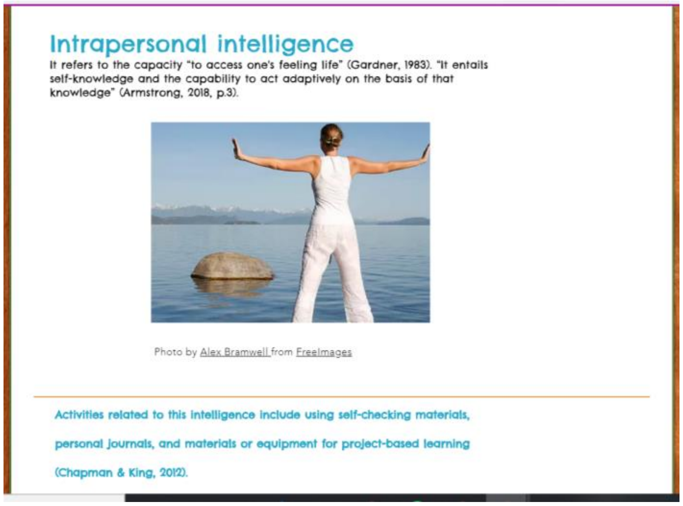
Photo by Davide Guglielmo from FreeImages

Interpersonal activities in the classroom include board games, discussions, debates, working collaboratively, and social media, among others (Chapman & King, 2012).

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.14

Intrapersonal Intelligence



Intrapersonal intelligence

It refers to the capacity "to access one's feeling life" (Gardner, 1983). "It entails self-knowledge and the capability to act adaptively on the basis of that knowledge" (Armstrong, 2018, p.3).

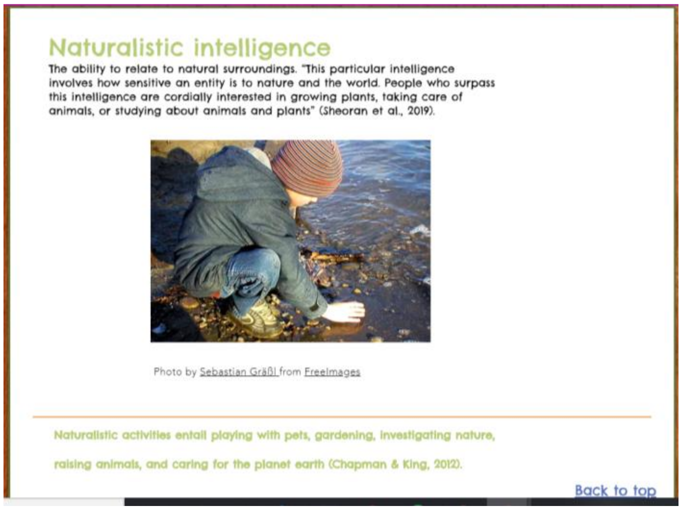
Photo by Alex Bramwell from FreeImages

Activities related to this intelligence include using self-checking materials, personal journals, and materials or equipment for project-based learning (Chapman & King, 2012).

Note: Screenshot of the screen view Multiple Intelligences link

Figure 4.15

Naturalistic Intelligence



Naturalistic intelligence

The ability to relate to natural surroundings. "This particular intelligence involves how sensitive an entity is to nature and the world. People who surpass this intelligence are cordially interested in growing plants, taking care of animals, or studying about animals and plants" (Sheoran et al., 2019).

Photo by Sebastian Gräßl from FreeImages

Naturalistic activities entail playing with pets, gardening, investigating nature, raising animals, and caring for the planet earth (Chapman & King, 2012).

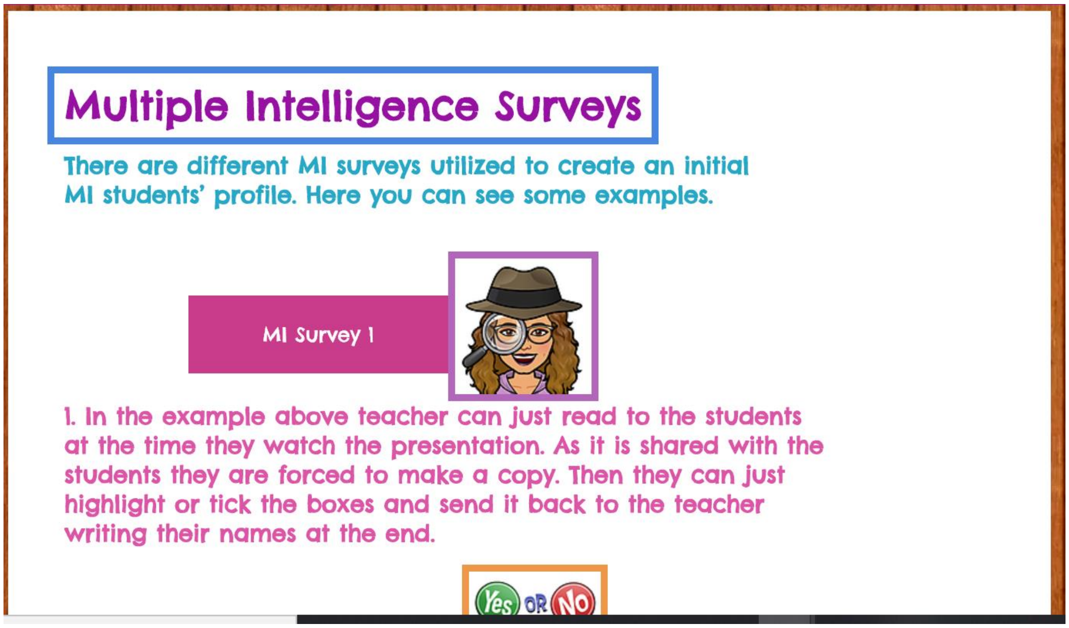
Note: Screenshot of the screen view Multiple Intelligences link

Section 3: MI Surveys

This section named MI Inventories explains that there are different kinds of inventories and formats teachers can use in the classroom in order to create an initial profile of students' MI proclivities and MIs to strengthen. There are three different survey samples included. Survey 1 is a Power Presentation that includes five different slides containing eight statements each one related to one MI. Each statement appears in a certain color corresponding to a MI and although the order of the MI statements changes, it is the specific color the one indicating the MI that statement corresponds to. In order to complete it, students make a copy of the presentation and highlight the statement that best describes them. (See Figures 4.16, 4.17, 4.18, 4.19, 4.20, 4.21, 4.22, 4.23 and 4.24).

Figure 4.16

Survey 1



Multiple Intelligence Surveys

There are different MI surveys utilized to create an initial MI students' profile. Here you can see some examples.

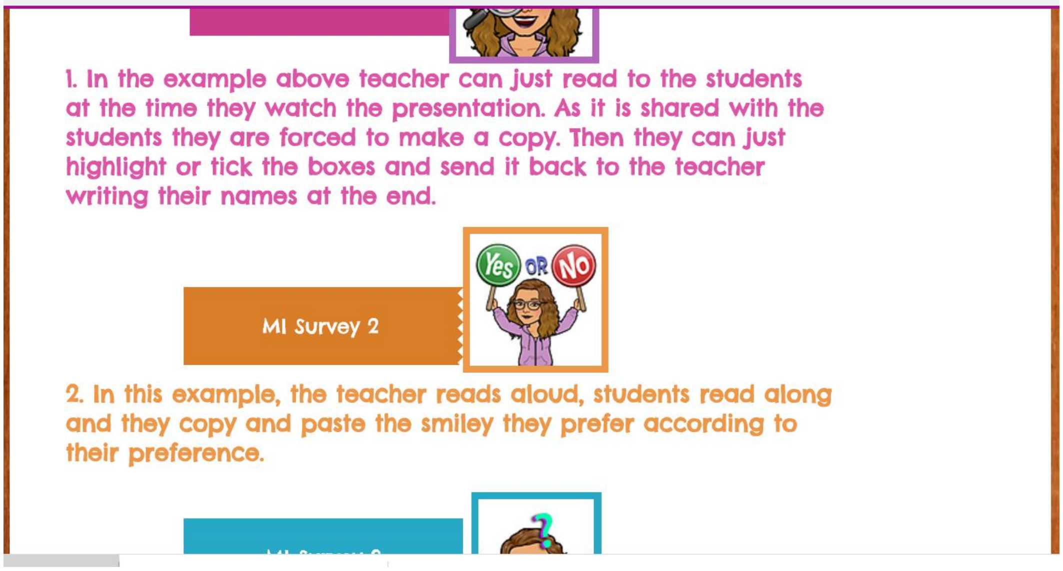
1. In the example above teacher can just read to the students at the time they watch the presentation. As it is shared with the students they are forced to make a copy. Then they can just highlight or tick the boxes and send it back to the teacher writing their names at the end.

Note: Screenshot of the screen view Multiple Intelligence Surveys link

Survey 2 is a Word document containing charts with eight statements each one related to each MI. This time students are asked to choose a smile face out of three offered (red=not at all, yellow=sometimes, green= always) and copy it next to the statement that best identify the way they feel towards it. (See Figure 4.17 and Appendix A, Slides #1, 2, 3, 4, 5,6 and 7)

Figure 4.17

Survey 2



1. In the example above teacher can just read to the students at the time they watch the presentation. As it is shared with the students they are forced to make a copy. Then they can just highlight or tick the boxes and send it back to the teacher writing their names at the end.

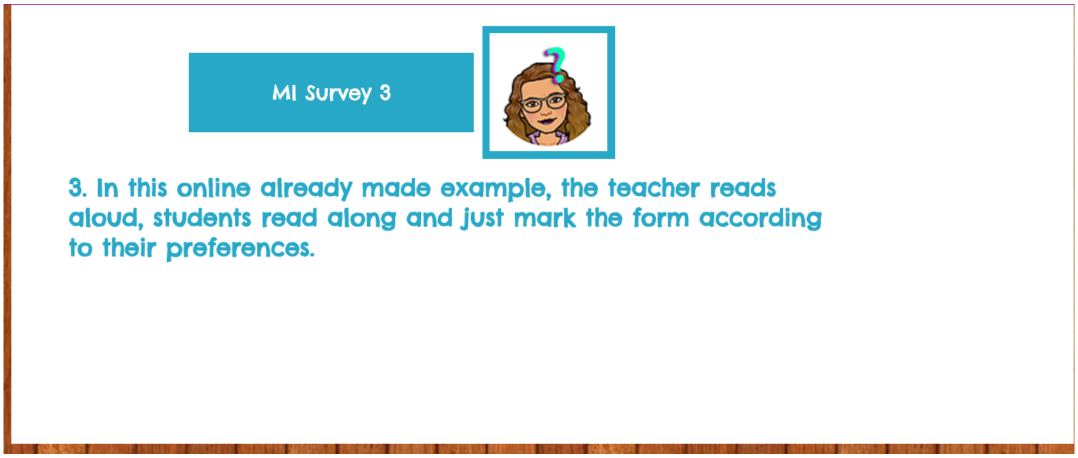
2. In this example, the teacher reads aloud, students read along and they copy and paste the smiley they prefer according to their preference.

Note: Screenshot of the screen view Multiple Intelligence Surveys link

Survey 3 is a link (https://www.literacynet.org/mi/assessment/findyourstrengths.html) of a pre-created online containing 56 prompts in which students follow along while the teacher reads aloud. Students just mark the answers according to their MI proclivities. (See Figure 4.18 and Figure 4.19)

Figure 4.18

Survey 3 Explanation



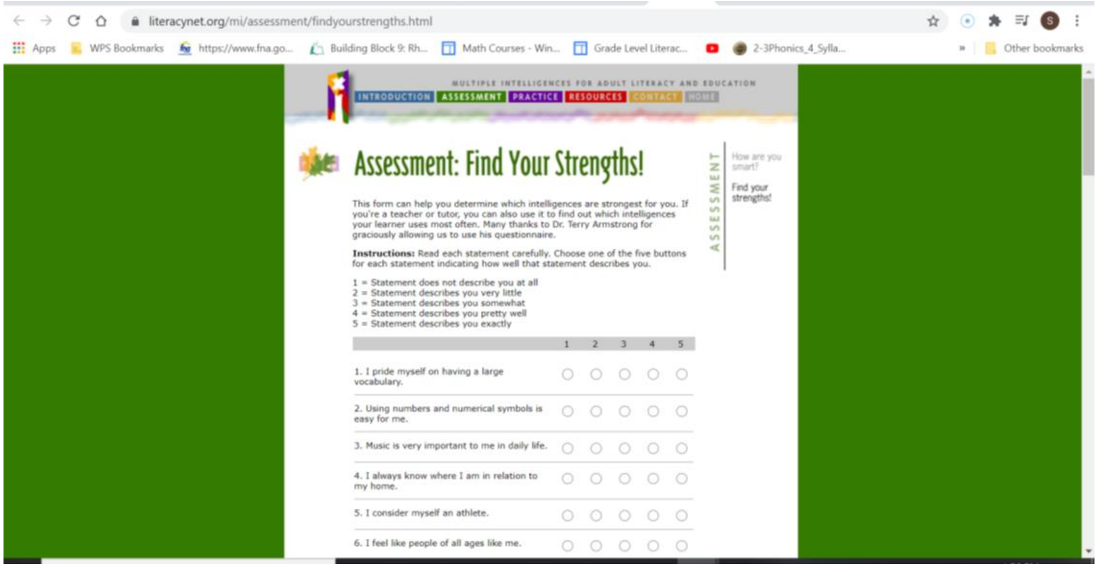
MI Survey 3

3. In this online already made example, the teacher reads aloud, students read along and just mark the form according to their preferences.

Note: Screenshot of the screen view Multiple Intelligence Surveys link

Figure 4.19

Survey 3



Assessment: Find Your Strengths!

This form can help you determine which intelligences are strongest for you. If you're a teacher or tutor, you can also use it to find out which intelligences your learner uses most often. Many thanks to Dr. Terry Armstrong for graciously allowing us to use his questionnaire.

Instructions: Read each statement carefully. Choose one of the five buttons for each statement indicating how well that statement describes you.

1 = Statement does not describe you at all
2 = Statement describes you very little
3 = Statement describes you somewhat
4 = Statement describes you pretty well
5 = Statement describes you exactly

	1	2	3	4	5
1. I pride myself on having a large vocabulary.	○	○	○	○	○
2. Using numbers and numerical symbols is easy for me.	○	○	○	○	○
3. Music is very important to me in daily life.	○	○	○	○	○
4. I always know where I am in relation to my home.	○	○	○	○	○
5. I consider myself an athlete.	○	○	○	○	○
6. I feel like people of all ages like me.	○	○	○	○	○

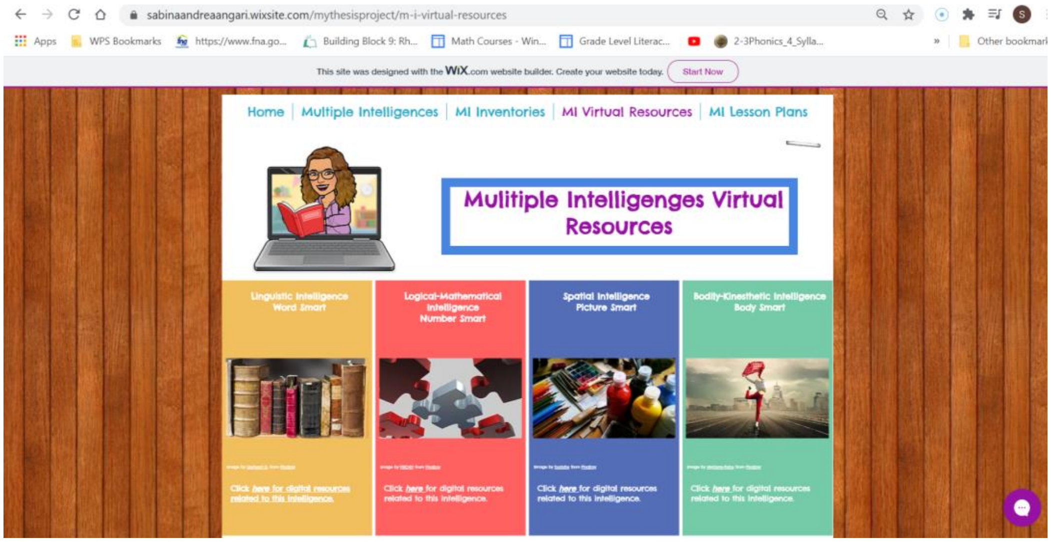
Note: Screenshot of the screen view Multiple Intelligence Surveys link

Section 4: MI Virtual Resources

Section 4 named MI Virtual resources contains eight different Word documents, one related to each MI. Each Word document contains a collection chart entailing more than ten digital resources according to the specific MI, alink that takes to each website or app, a brief description of the tool and a tutorial video, and a link with a text description or related video explaining what the resource is about, how to use it in the classroom or just a sample section. (See Figure 4.20 and 4.21. See also Appendixes C, D, E, F, G, H I, J).

Figure 4.20

MI Virtual Resources



This site was designed with the WiX.com website builder. Create your website today.

Click here for digital resources related to this intelligence.

Click here for digital resources related to this intelligence.

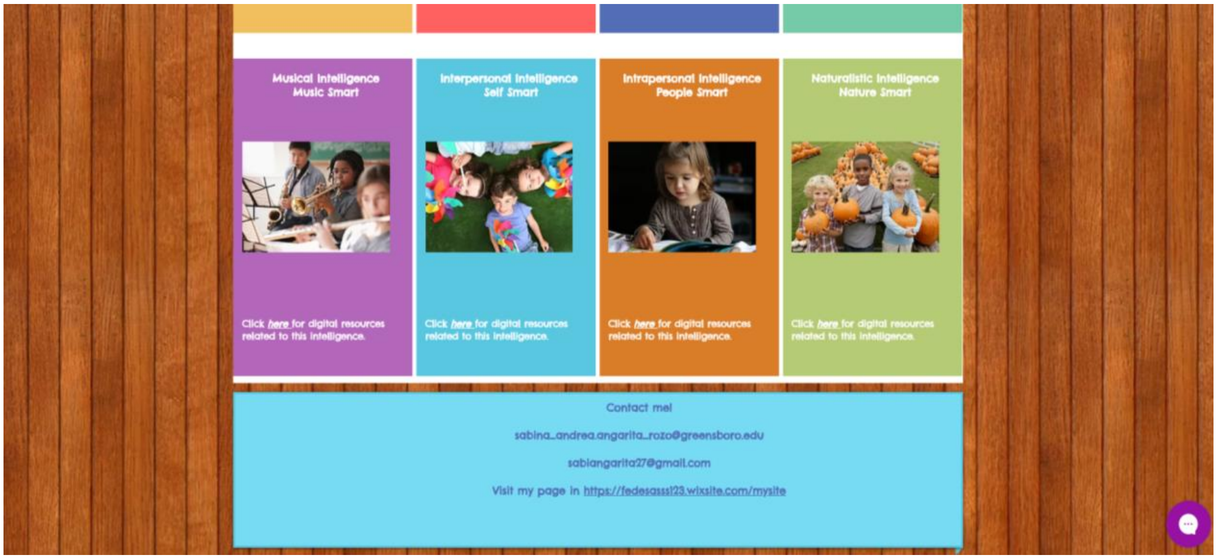
Click here for digital resources related to this intelligence.

Click here for digital resources related to this intelligence.

Note: Screenshot of the screen view MI Virtual resources section

Figure 4.21

MI Virtual Resources Continuation



Musical Intelligence
Music Smart

Click *here* for digital resources related to this intelligence.

Interpersonal Intelligence
Self Smart

Click *here* for digital resources related to this intelligence.

Intrapersonal Intelligence
People Smart

Click *here* for digital resources related to this intelligence.

Naturalistic Intelligence
Nature Smart

Click *here* for digital resources related to this intelligence.

Contact me!

sabina_andrea.angarita_rozo@greensboro.edu

sabiangarita27@gmail.com

Visit my page in https://fedesasss123.wixsite.com/mysite

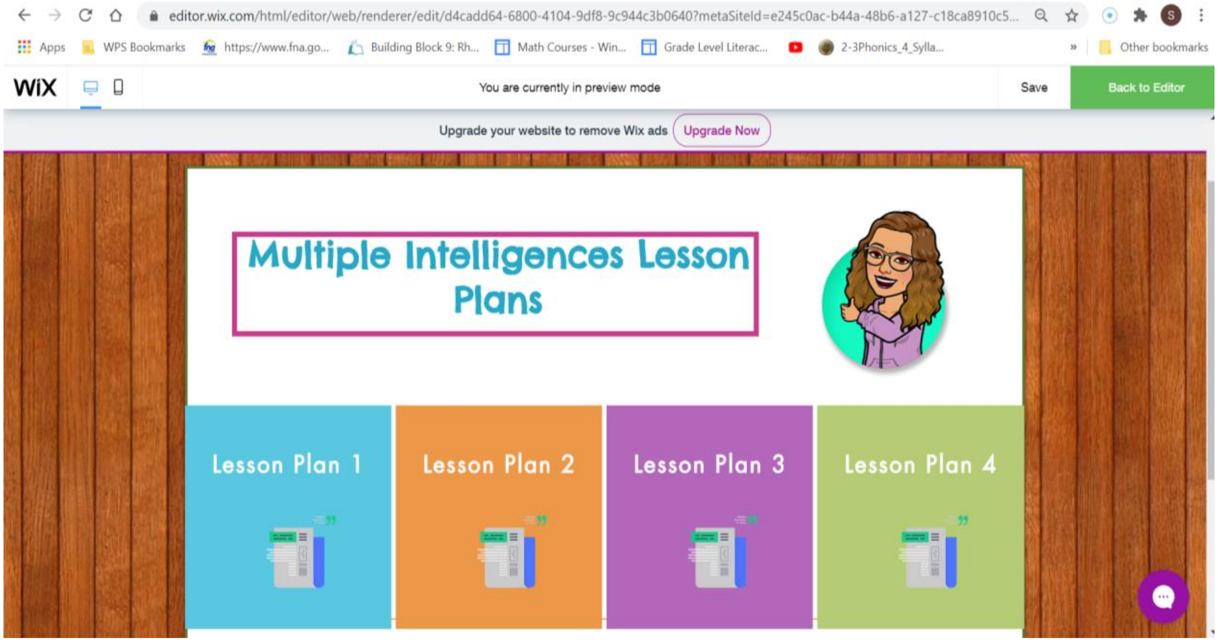
Note: Screenshot of the screen view MI Virtual resources section

Section 4: MI Lesson Plans

Finally, in the section that appears named as MI Lesson Plans in the Website sections bar, there are four different lesson plans that were created under SIOP approach. Those lesson plans were created with an integrated curriculum in mind for second and third grade classes. (See Figure 4.22).

Figure 4.22

MI Lesson Plans


editor.wix.com/html/editor/web/renderer/edit/d4cadd64-6800-4104-9df8-9c944c3b0640?metaSiteId=e245c0ac-b44a-48b6-a127-c18ca8910c5...
Apps
WPS Bookmarks
https://www.fna.go...
Building Block 9: Rh...
Math Courses - Win...
Grade Level Literac...
2-3Phonics_4_Sylla...
Other bookmarks
WiX
You are currently in preview mode
Save
Back to Editor
Upgrade your website to remove Wix ads
Upgrade Now
Multiple Intelligences Lesson Plans
Lesson Plan 1
Lesson Plan 2
Lesson Plan 3
Lesson Plan 4

Note: Screenshot of the screen view MI Lesson Plan section

Each lesson plan entails different components. The first one is a short description regarding grade level, instruction model used (which could be hybrid or 100% distant learning), subjects integrated according to the curriculum, MI (all of them are included in each lesson plan and WIDA descriptors regarding four domains listening, speaking, reading and writing. After that, there is a section showing the content objectives the lessons emphasize regarding the integrated subjects and language objectives to be accomplished as well. Subsequently, there is a section displaying 21st century skills, academic vocabulary required, and language demands entailed in the lessons. In the same way the is a reference to students' prior knowledge activated during the lessons. By the same token, didactic sequence followed in each lesson plan includes a detail description of six different steps namely: focus and review, objectives statement, teacher input, guided practice, independent practice, and assessment methods.

Eight different activities were designed for independent practice and for assessment methods as well. Although it is not necessary to include them all during one lesson, as these lesson plans are designed for mini units taking almost a week, it was meaningful to include a large and varied amount as samples. A general quiz or test as a summative assessment completement was included after MI assessment strategies, along with a rubric that can be used by the teacher or even by the students as a self-assessment tool. Choices will depend on teachers' professional judgement.

In the same way, each lesson plan contains a closure section, assessment strategies for teachers to gauge goals' completion and decide on further actions. Modifications/accomodations recommended also appear in the lesson plans, as well as section compiling online resources included and a reflection on the design of each lesson plan. (See lesson plan samples included in Appendices K, L, M, and N).

Chapter 5: Conclusions

During the elaboration of this project, there were many moments of deep comprehension and even revelation regarding differentiated online digital activities for culturally diverse students based on the theory of Multiple Intelligences (MI). In first place, I could confirm through the literary revision the way in which recognized researchers and teachers have validated differentiation as a meaningful tool to cope with the differences students face within the classroom (Tomlinson, 2014). Likewise, some other experts (Armstrong, 2018) have demonstrated the usefulness, functionality, and convenience of applying MI theory within the classroom from diverse perspectives. These include areas, such as content, process, product, and even learning environments in which MI represents a differentiating tool that takes into account varied intelligences proclivities among the students.

As Ferlazzo (2018) affirmed in his educational video, differentiation means "recognizing that our students bring different gifts and challenges, and as educators we need to use our professional judgement to flexibly respond to them in our teaching". Since there are different areas that can be differentiated, MI's frame can be used as a powerful tool to differentiate among culturally and linguistically diverse CLD students. Online digital tools constitute a broad field, which can offer diverse resources in order to implement differentiation from multiple perspectives regarding MI as an instructional frame. By the same token, digital interactive tools have become more popular since technology advances at a very fast speed, and with it, thousands of apps, blogs, websites, LMS appear almost daily. Furthermore, after the

World Health Organization declared COVID-19 a pandemic back in March, education has been one of the most affected sectors. Educators have been forced to give good account of online tools and to learn about technological strategies and resources along the way.

It was an enriching and revealing process to research digital resources that could fit every intelligence since there are thousands of useful and innovative material on the web right now. I could easily affirm that there are numerous resources existing in the web we teachers are clueless about. Personally, I discovered many tools that I put into practice shortly after the discovery and a great amount of the resources have proven to be really useful for my class. In contrast, there are many resources included in both the resources lists of reference and in the lesson plans that could easily fit within different intelligences. However, choices will be subjective since they will depend on distinct aspects, such as the teacher's professional preference, teaching approach, and class goals among others.

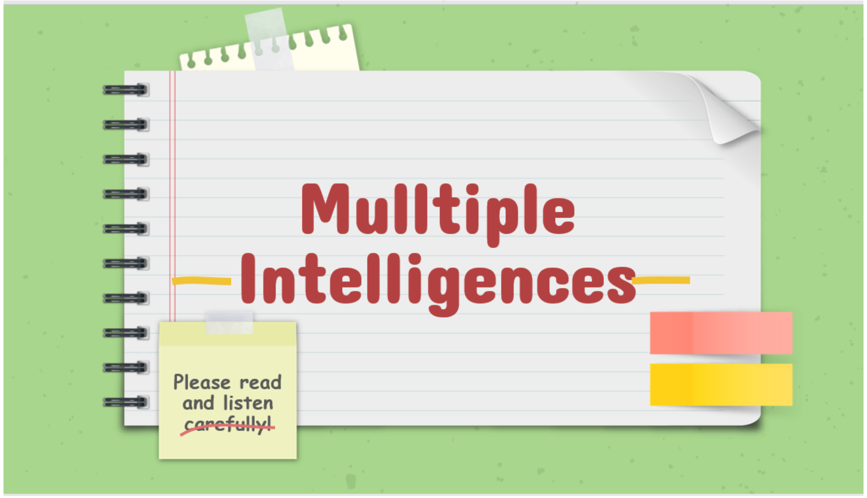
Regarding the lesson plans they were designed with some of the resources included in the reference lists and many other different ones. As the didactic sequence described in the lesson plans was adopted from the SIOP model with CLD students in mind, it is always subject to changes according to teachers' preferences and educational institutions requirements. Regarding the inclusion of MIs in each lesson plan, it is not necessary to include or emphasize them all during all the lessons. However, noting that lesson plans were designed for topic units combining two or more subjects, activities related to the eight MIs were included in order to give teachers a broader idea of the ways those could be implemented.

Through my own experience I have seen how both English as a second language teachers and content teachers as well, constantly struggle at the time to find resources that allow to differentiate instruction in the classroom, especially now when virtual class times have been reduced because of different reasons. It is my hope that this website can be considered by parents and teachers as meaningful and useful resources or at least as good points of departure to find varied and differentiated resources that allow students in general but especially CLD students to boost their virtual English learning process. Finally, for this website to be a meaningful resource, it will need to be updated reason why teachers and parents' contributions would be more than appreciated.

Appendices

Appendix A: MI Survey 1 Power Point presentation

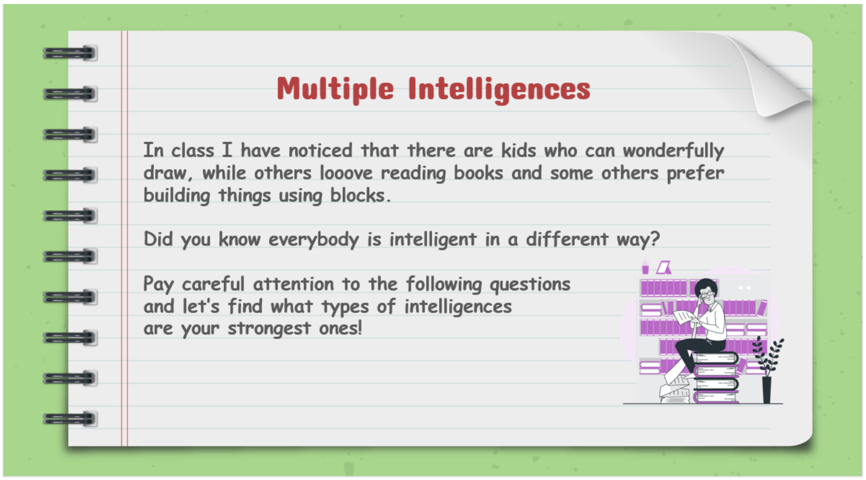
Slide # 1



Mulltiple Intelligences

Please read and listen ~~carefully!~~

Slide # 2



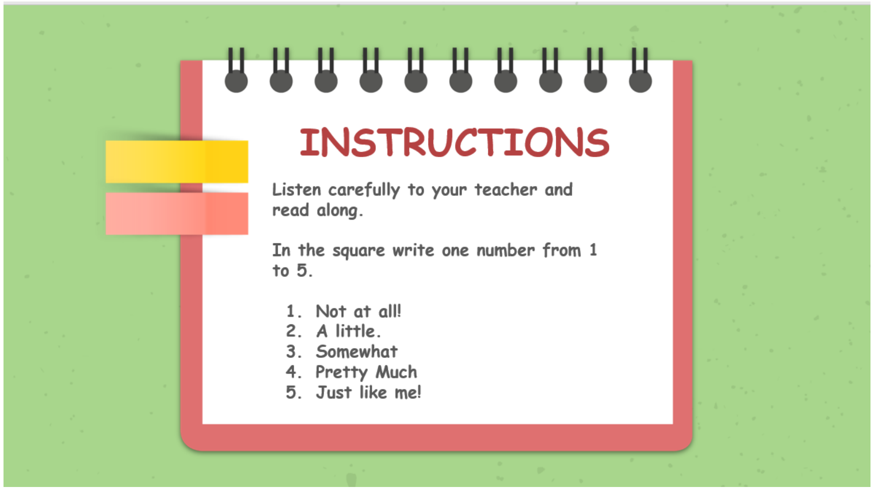
Multiple Intelligences

In class I have noticed that there are kids who can wonderfully draw, while others looove reading books and some others prefer building things using blocks.

Did you know everybody is intelligent in a different way?

Pay careful attention to the following questions and let's find what types of intelligences are your strongest ones!

Slide # 3



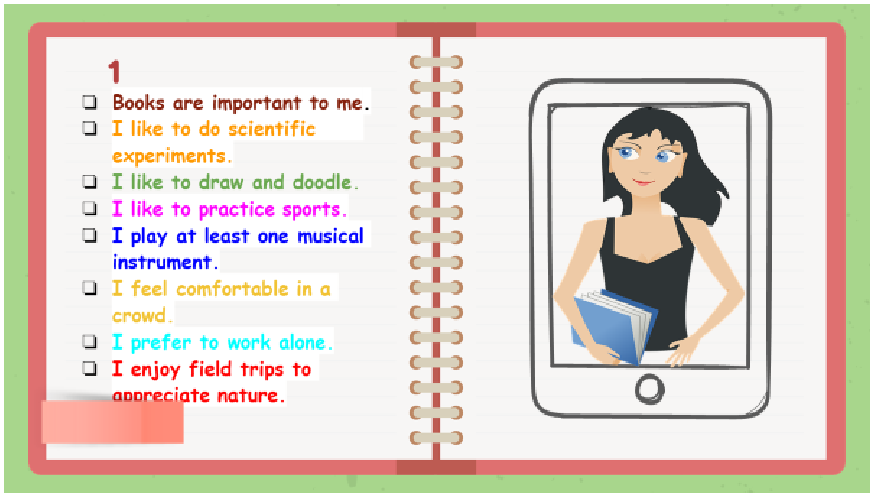
INSTRUCTIONS

Listen carefully to your teacher and read along.

In the square write one number from 1 to 5.

1. Not at all!
2. A little.
3. Somewhat
4. Pretty Much
5. Just like me!

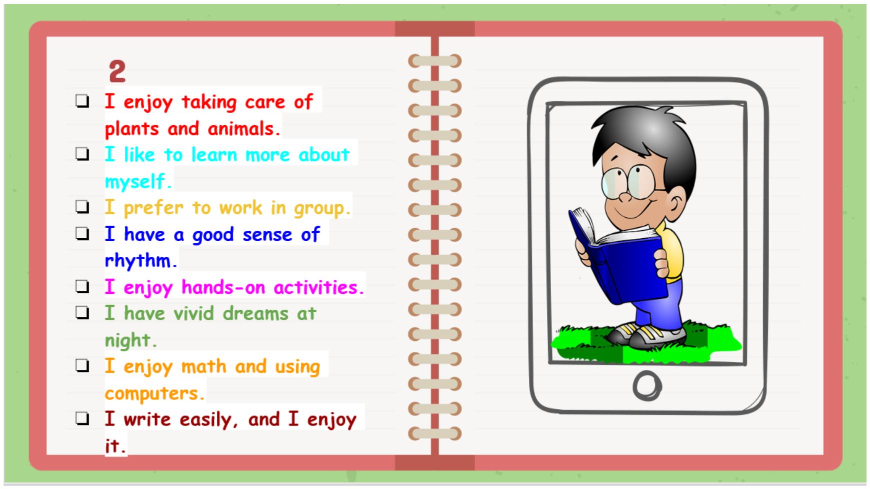
Slide # 4



1

- ☐ Books are important to me.
- ☐ I like to do scientific experiments.
- ☐ I like to draw and doodle.
- ☐ I like to practice sports.
- ☐ I play at least one musical instrument.
- ☐ I feel comfortable in a crowd.
- ☐ I prefer to work alone.
- ☐ I enjoy field trips to appreciate nature.

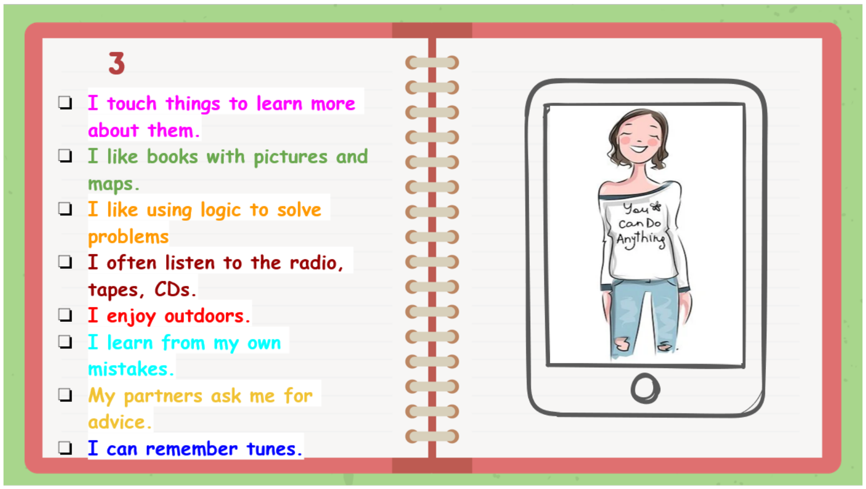
Slide # 5



2

- ☐ I enjoy taking care of plants and animals.
- ☐ I like to learn more about myself.
- ☐ I prefer to work in group.
- ☐ I have a good sense of rhythm.
- ☐ I enjoy hands-on activities.
- ☐ I have vivid dreams at night.
- ☐ I enjoy math and using computers.
- ☐ I write easily, and I enjoy it.

Slide # 6

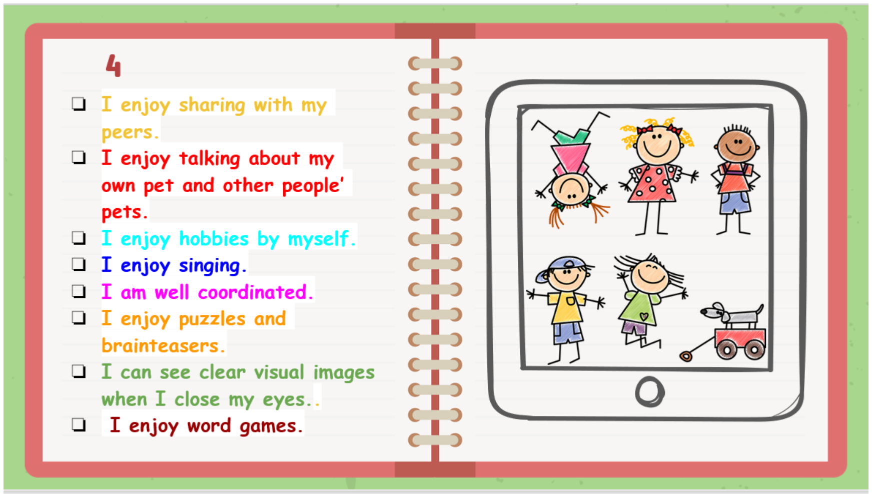


3

- ☐ I touch things to learn more about them.
- ☐ I like books with pictures and maps.
- ☐ I like using logic to solve problems
- ☐ I often listen to the radio, tapes, CDs.
- ☐ I enjoy outdoors.
- ☐ I learn from my own mistakes.
- ☐ My partners ask me for advice.
- ☐ I can remember tunes.

You can Do Anything

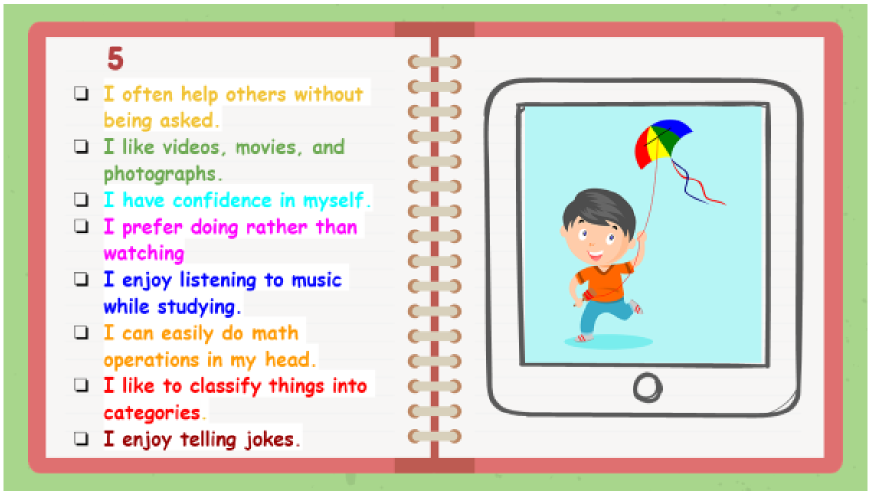
Slide # 7



4

- ☐ I enjoy sharing with my peers.
- ☐ I enjoy talking about my own pet and other people' pets.
- ☐ I enjoy hobbies by myself.
- ☐ I enjoy singing.
- ☐ I am well coordinated.
- ☐ I enjoy puzzles and brainteasers.
- ☐ I can see clear visual images when I close my eyes..
- ☐ I enjoy word games.

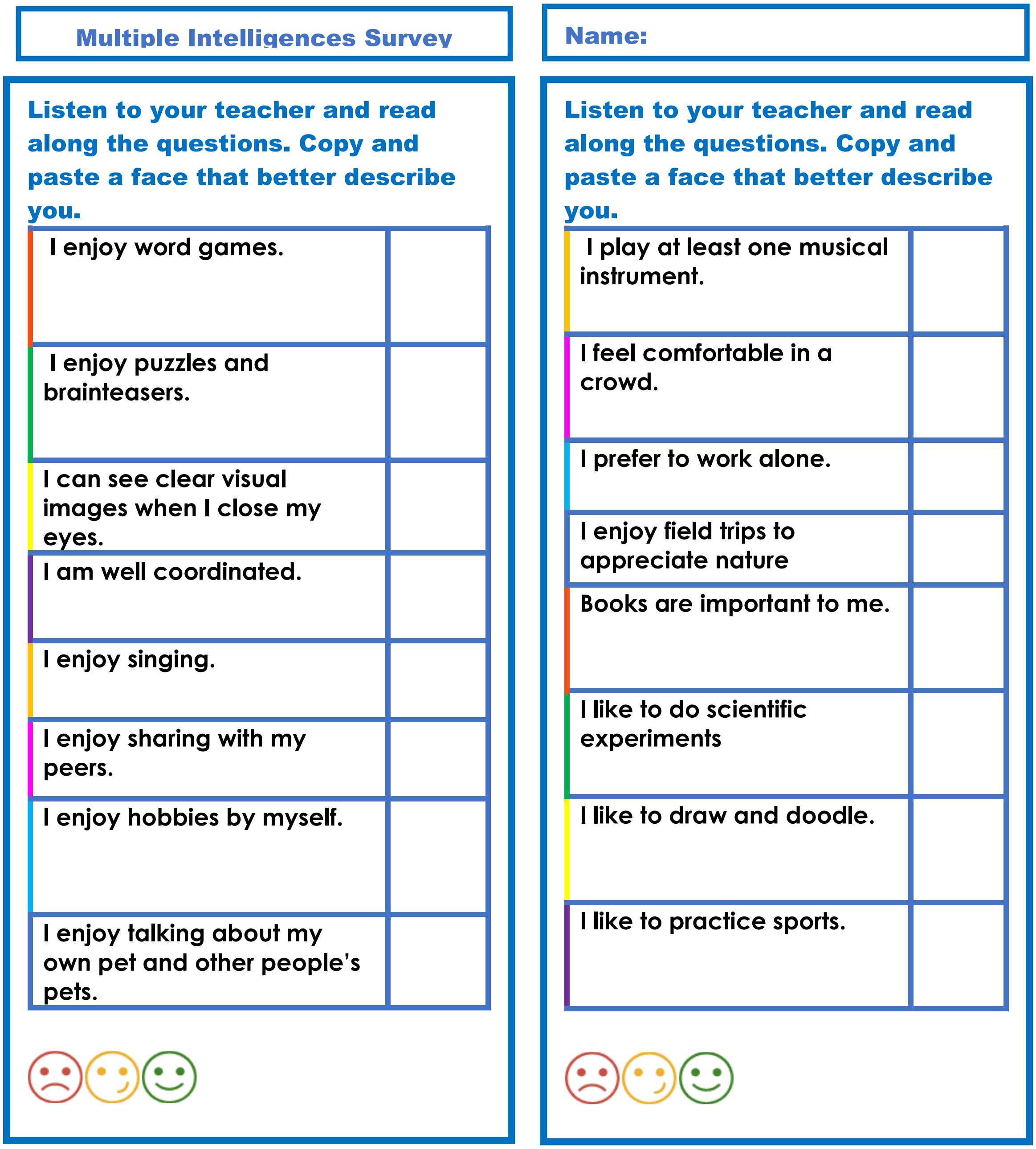
Slide # 8



5

- ☐ I often help others without being asked.
- ☐ I like videos, movies, and photographs.
- ☐ I have confidence in myself.
- ☐ I prefer doing rather than watching
- ☐ I enjoy listening to music while studying.
- ☐ I can easily do math operations in my head.
- ☐ I like to classify things into categories.
- ☐ I enjoy telling jokes.

Appendix B: MI Survey 2 Word Document



Multiple Intelligences Survey

Listen to your teacher and read along the questions. Copy and paste a face that better describe you.

I enjoy word games.	
I enjoy puzzles and brainteasers.	
I can see clear visual images when I close my eyes.	
I am well coordinated.	
I enjoy singing.	
I enjoy sharing with my peers.	
I enjoy hobbies by myself.	
I enjoy talking about my own pet and other people's pets.	

Name:

Listen to your teacher and read along the questions. Copy and paste a face that better describe you.

I play at least one musical instrument.	
I feel comfortable in a crowd.	
I prefer to work alone.	
I enjoy field trips to appreciate nature	
Books are important to me.	
I like to do scientific experiments	
I like to draw and doodle.	
I like to practice sports.	

Multiple Intelligences Survey

Listen to your teacher and read along the questions. Copy and paste a face that better describe you.

I touch things to learn more about them	
I like books with pictures and maps	
I like using logic to solve problems	
I often listen to the radio, tapes, CDs.	
I enjoy taking care of plants and animals.	
I like to learn more about myself.	
I prefer to work in group	
I have a good sense of rhythm.	

☹ 😐 ☺

Name:

Listen to your teacher and read along the questions. Copy and paste a face that better describe you.

I enjoy math and using computers.	
I enjoy hands-on activities.	
I have vivid dreams at night.	
I write easily, and I enjoy it	
I often help others without being asked.	
I like to classify things into categories	
I have confidence in myself.	
I enjoy listening to music while studying.	

☹ 😐 ☺

Multiple Intelligences Survey

Listen to your teacher and read along the questions. Copy and paste a face that better describe you.

I like videos, movies, and photographs.	
I learn from my own mistakes.	
I can easily do math operations in my head.	
My partners ask me for advice.	
I enjoy outdoors.	
I prefer doing rather than watching	
I enjoy telling jokes.	
I can remember tunes.	

☹ 😏 ☺

OFF THE CHARTS!

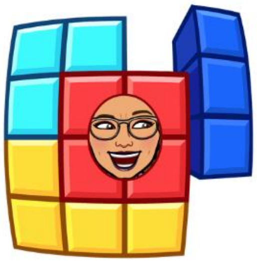
Appendix C: MI Virtual Resources – Linguistic Intelligence

Linguistic Intelligence (Word Smart)

Digital tool	What is it about?	Tutorial video/website
Google Docs	Allows to create, edit format written documents, including pictures and diagrams.	How to use Google Docs?
Google Slides	Allows to create and format online presentations individually or in collaboration with other people.	How to use Google Slides?
Educaplay	Free website that allows to create interactive educational activities such as crosswords, jumbled words, jumbled sentences, dictations and creating collections.	How to use Educaplay?
Pinup	Free website that allows to create Sticky notes adding words and images and pin them up on a virtual board.	How to use Pinup?
Linoit	Free service that allows you to create a canvas of online	How to use Linoit?

	multimedia sticky notes	
Agendaweb	Free website with English exercises: grammar, verbs, vocabulary, games for listening and reading comprehension. Tiered materials for CLD learners, including beginners, intermediate and advanced levels.	How to use Agendaweb?
Mentimeter	Free website that allows to create synchronous polls, surveys, questions and answers, quizzes with instantaneous results.	Mentimeter Tutorial - Create your first Mentimeter presentation
WriteReader	Researched-based learning system for developing motivation and literacy skills by creating books, adding words and images.	How to use WriteReader - enabling students to become authors
Quizlet	Free website providing students with learning resources, including flashcards, study modes, and game modes.	How to Use Quizlet
Free Online Puzzle-maker	Instant free online crossword puzzle maker that allows you to generate puzzles using your own words.	How to use Puzzle-maker?
Padlet	Free website where teachers and students can create collaborative virtual bulletin boards, share and reflect on posts, pictures and links.	How to Use Padlet for Students: The Basics

Appendix D: MI Virtual Resources – Logical-mathematical Intelligence



Logical-Mathematical Intelligence (Number Smart)

Digital tool	What is it about?	Tutorial video/website
Google Drawings	Allows to create, edit format charts and diagrams with different purposes.	Google Drawings tutorial for students
Lucidchart	Allows to create and format online mind maps, diagrams and flowcharts. No download needed.	How to use Lucidachart?
Puzzle Maker by Discovery Education	Tool that allows to create and print personalized puzzles, word searches, crosswords for students, parents and teachers.	How to Create A Word Search Using Puzzle Maker
Softschools timeline Maker	Free tool that allows to generate word scramble activities, word searches, · math puzzles with words or sentences and timelines.	Free Math worksheets, Free phonics worksheets, Math Games and Online activities and Quizzes
Scratch	Free programming tool based on using blocks, aimed for children. Students can code interactive stories and share them with partners and teachers.	Programming for Kids and Everybody: Learn Scratch Programming
Braillebug.org	Free interactive tool brought by American Printing House (APH).Braille Bug is a platform for children that teaches braille to	Explore braillebug.org

	sighted children from grades 3 through 6 and promotes reading among sighted students.	
Crossword Puzzle - Thanksgiving (Aviva Furman)	Free website providing lesson plans and ideas for teachers and countless resources for different leveled English learners.	Internet TESL Journal (For ESL/EFL Teachers)
Treasure.run	Website that creates customized treasure hunt games for kids including puzzles and riddles.	Explore Treasure.run
Puzzle Creator	Free website that allows you to create interactive crossword puzzles.	Explore Reading is fundamental
Educaplay - Riddle generator	Free website that allows you to generate your own online **Riddle** or search among the thousands of **Riddles** that other **Educaplay** users have created.	How to create a riddle in Educaplay
Rebus Puzzles Brainteasers	Rbus are picture representations of names, work of phrases. This website offers educational resources related to science, current environment, and health for students, parents and teachers.	Kids Homepage - Kids Environment Kids Health - National Institute of Environmental Health Sciences
Ratty robs a bank Spycat The super spy trail	Free tool brought by the British Council. It contains countless resources including online games, stories, songs, videos for English learning students.	Explore learnenglishkids.britishcouncil.orgs

Appendix E: MI Virtual Resources – Spatial Intelligence

Spatial Intelligence (Picture Smart)

Digital tool	What is it about?	Tutorial video/website
Take Action�Water Stewardship Discover Water Project WET	This specific section of the website https://www.discoverwater.org/ allows you to create a customized action poster with words and pictures including specific actions to conserve water.	Learn about Water Discover Water Project WET
Google Slides	Allows to create and format online presentations individually or in collaboration with other people.	How to use Google Slides?
Storyboard Creator | Comic Strip Maker | Storyboard Maker	Free website that allows students, parents and teachers to create two storyboards per week for free including different characters and dialogs.	Getting Started with Storyboard That
PixtonEDU	Free website that allows students, parents and teachers to create comics and storyboards.	Pixton EDU: Intro for Educators
PizAp.com	Website with several free resources that allows students and teachers to	piZap's Quick Photo Editing Tutorial: Create

	make MEMEs, edit photos, design and make collages.	Reminders for Kids
Tinkercad	Free kid-friendly app that teachers and students use to r 3D design, electronics, and coding.	Tinkercad Examples for Kids
Helen Keller's Birthplace 3D Model	Free online resource that allows students to explore Helen Keller's birthplace and many other famous places through the use of Matterport, a three-dimensional camera system.	Matterport – HistoryView Virtual Tours
Toytheater.com	Free website containing interactive online art, reading & math games for kids. Students can play different games and create their own animations.	Animation in Toy Theater
Alimentarium	Free website founded by Nestle that contains online food exhibitions, interactive presentations and cooking workshops for kids and adults.	Dishes of the World
PicMonkey editor	Free and Pro subscription app that allows edit photos, design and create templates and collages.	Explore Pickmonkey
Canva Free infographic maker	Website that allows users to combine and edit images to create digital graphic designs.	Make an Infographic In Canva for Kids
City Creator Build a City	software for children, children can use the software in a rich props playing Blox 3D city, including banks, schools, homes, apron, citizens, police, fugitive 7 species base model construction, there will be built after some interesting things happen, in addition also supports .	Blox 3D City Creator Apps for Kids

Appendix F: MI Virtual Resources – Bodily-kinesthetic Intelligence

Bodily-Kinesthetic Intelligence (Body Smart)

Digital tool	What is it about?	Tutorial video/website
GoNoodle	Website with movement and mindfulness videos created by experts. Users move while learning English.	EdTech Tutorial: How To Use Go Noodle In The Classroom
Sign the Alphabet - a game on Funbrain	Free educational games, books, comics, videos for students to develop reading and literacy, math, problem solving skills.	About Funbrain
Learning station	Free website with countless collections of audio and video resources that make part of the educational curricula of childhood education.	The Learning Station | Music & Movement for Children
https://cosmickids.com	Free website that promotes movement, yoga and mindfulness so that students can enjoy physical, mental and emotional benefits.	Cosmic Kids

Online Kids Yoga Classes to do at Home (Free and paid!)	Website with free and paid resources for teaching kids yoga. Through different themed video lessons kids learn English at the same time that learn breathing techniques and yoga poses.	About Kumarah Yoga and Wellness
Screencastify	Free chrome extension that allows users to record, edit, share computer videos.	How to Use Screencastify
Yoga for kids with animals - Smile and Learn	Digital resource to follow instructions in English while practicing Yoga poses.	Smile and Learn - English
Seesaw	Digital platform that allows students to create, reflect, share, and collaborate. "showing what they know" using photos, videos, drawings, text, PDFs, and links.	Seesaw tutorial for teachers
YouTube.com	Free online video-sharing platform with countless videos including multiple and varied educational resources.	YouTube in the Classroom: 7 Tips and Best Practices
Kidsbop Videos	Digital tool compiling videos featuring kids singing and dancing contemporary pop songs making them more kid-friendly in terms of language,	KIDZ BOP Kids - Best Classroom Dance Along Videos
https://www.learn4good.com/games/playsportsonline3.htm	Free online tool that allows young children and teens to digitally practice popular sports such as football, soccer, baseball, basketball, golf, pool, bowling, air hockey, curling, extreme snowboarding, and skateboarding.	Play Sports Games online for free,all sport for kids football soccer baseball with no download

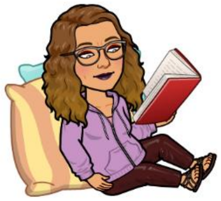
Appendix G: MI Virtual Resources – Musical Intelligence

Musical Intelligence (Music Smart)

Digital tool	What is it about?	Tutorial video/website
Music - English Vocabulary	Digital audio/picture dictionary for English learners.	English Vocabulary
Bussongs | Nursery Rhymes & Kids' Songs | BusSongs.com	Free website compiling an extensive collections of songs and nursery rhymes for kids	BusSongs Channel Showreel
Children's Songs Lyrics, Midis, Printouts, and Videos from The Teacher's Guide	Free website with countless downloadable and printable lyrics, videos and musical instrument digital interface (MIDIs) for kids.	http://www.theteachersguide.com/ChildrensSongs.htm
Jack Hartmann Kids Music Channel	YouTube channel compiling multiple videos of educational songs, nursery rhymes to promote English learnings among kids.	https://www.youtube.com/user/JackHartmann/about
ESL Kids Songs, Songs for Learning English, Teach Children with Songs	Website compiling multi-level resources for English learners. This section contains a songs list of songs with lyrics, audios and videos along with language	Freddiesville

	learning objectives for young learners.	
Learn Songs (For ESL/EFL Students)	Free website containing varied resources for English language learners. This section contains an extensive list of songs for young learners including the lyrics and the audios with explanatory podcasts and explicit learning objectives.	https://www.manythings.org/songs/
FunSongs Education - Best for the World by Charles Goodger	Youtube channel including some free videos including songs with lyrics, movements and gestures.	FunSongs Education Videos
Rhyming Dictionary For Kids	Free digital family-friendly rhyme dictionary for kids including examples.	About rhymedesk
YouTube.com	Free online video-sharing platform with countless videos including multiple and varied educational resources.	YouTube in the Classroom: 7 Tips and Best Practices
Kidsbop Videos	Digital tool compiling videos featuring kids singing and dancing contemporary pop songs making them more kid-friendly in terms of language,	KIDZ BOP Kids - Best Classroom Dance Along Videos
Children's Music - Free Karaoke	Digital tool containing a 100% Free Karaoke Section: free MP3 instrumental tracks. Young learners can have fun learning traditional songs in English, French, Spanish and German!	Karaoke Version: Karaoke Song, MP3 Instrumental Playback

Appendix H: MI Virtual Resources – Intrapersonal Intelligence



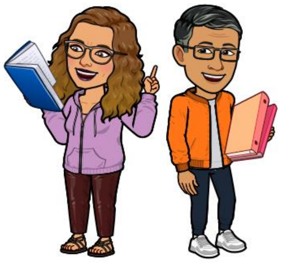
Intrapersonal Intelligence
(Self Smart)

Digital tool	What is it about?	Tutorial video/website
All Word Sets	Free digital tool that helps CLD students to memorize English vocabulary words including images, pronunciation and games.	How to use Learning Chocolate to improve your English
Thinglink	Free technology platform that allows users to augment images, videos, and virtual tours with additional information and links.	Thinglink for Students
Community Club Home	Digital resource compiling 15 nonfiction read-along books for young ESL learners to listen and read texts with pictures and audio...	http://teacher.scholastic.com/commclub/index.htm
Agendaweb	Free website with English exercises: grammar, verbs, vocabulary, games for listening and reading comprehension. Tiered materials for CLD learners, including beginners, intermediate and advanced levels.	How to use Agendaweb?

Speaking Characters For Education	Digital tool that allows students to overcome confidence language barriers by creating talking avatars through typing in (text-to-speech), phoning in, or recording a message the Voki avatar verbally recites.	Official Voki Tutorial: How to Create and Publish Your Voki
Unite for Literacy	Free website offering easy audio books for young students to read and listen accompanied by text and illustrations available in 34 languages.	Unite For Literacy
Epic	Digital library containing fiction and non-fiction visual eBooks from leading publishers for learners to read along and look at the pictures, as they listen to the audio. Built-in tools are available such as click on word pronunciation for narration and options to magnify or underline.	How to use Epic Books
Storyline Online	Free digital series of videos in which well-known actors read aloud quality children liter	About rhymedesk
YouTube.com	Free online video-sharing platform with countless videos including multiple and varied educational resources.	YouTube in the Classroom: 7 Tips and Best Practices
Starfall	Website with free and paid online resources designed to help young learners to read with four different main sections: ABCs, Learn to Read, It's Fun to Read and I'm Reading It scaffolds reading instruction through images and interactive voice-over stories. **Grades K - 3**	Starfall's Remote Learning Resources for Parents & Teachers
City Creator Build a City	Free featured software for	Blox 3D City Creator Apps

	children to make Blox 3D cities, including banks, schools, homes, apron, citizens, police, fugitives and some other items.	for Kids
Create Your Own Art	Free editable canvas that allows users to create their own digital collages with recyclable objects.	http://www.aminahsworld.org/create/ArtBuilder.html

Appendix I: MI Virtual Resources – Interpersonal Intelligence

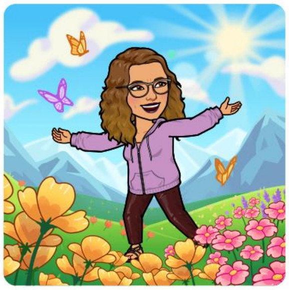


Interpersonal Intelligence
(People Smart)

Digital tool	What is it about?	Tutorial video/website
Scrumblr	Free digital tool that allows to communicate in real-time through sticky note cards on a sprint board.	How to use Scrumblr
Popplet | Mind maps made easy	Free clog-and-drag mind mapping application that allows to organize and share information in a meaningful real-time way.	Popplet allows your students to do collaborative brainstorming
Adobe Spark	Digital resource that allows to create and share short videos, social graphics and websites.	Adobe Spark Tutorial
Screencast-O-Matic: Screen Recorder & Video Editor	Digital tool that allows to create and share individual and team screen recordings and videos. Free and paid version.	Beginner's Guide to Screencast-O-Matic's Free Screen Recorder
Explain Everything | Interactive Whiteboard with Real-Time Collaboration	Online interactive whiteboard app in which users can create projects and export them as videos, PDfs and images.	The Tour of Explain Everything Interactive Whiteboard

Padlet	Online virtual bulletin board which allows teachers and students to collaborate, post, share, reflect ideas including text, images, audio and videos.	How to Teach Remotely with Padlet
Twiddla	Online interactive collaborative whiteboard that allows students and teachers to mark up websites, graphics and photos and also to start on a blank canvas.	3 Minute Teaching With Technology Tutorial - Twiddla
https://pinup.com	Free collaborative app that allows you to create and share your ideas through sticky notes on an interactive board.	How to Use pinup.com
https://jamboard.google.com/	Collaborative interactive whiteboard that allows users to create and share work in real time.	Getting Started with Google Jamboard (Web Version) Tutorial
Flipgrid	Free website with multiple pre-created resources from other teachers in which teachers can create and share grids which are like message boards that can be responded to through videos.	How to use Flipgrid

Appendix J: MI Virtual Resources – Naturalistic Intelligence



Naturalistic Intelligence (Nature Smart)

Digital tool	What is it about?	Tutorial video/website
Easy Science Experiments, Videos, and Science Fair Ideas	Free digital tool compiling science and experiments videos, questions and answers, experiment ideas enhancing research skills.	https://www.youtube.com/user/ScienceBob/featured
Ecosystems: The Water Cycle: StudyJams! Science	Digital tool by Scholastic that allows students to recognize the Water Cycle and its effect in real life on a normal day.	https://www.youtube.com/user/ScienceBob/featured
The Natural World - Resources for Teaching and Learning English	Digital resource nature featured section. It includes lessons with audio visual materials for enhancing English language learning.	ESOL Courses - Free English Lessons Online
Houghton Mifflin Science: Discover! Simulations	Free digital tool launched by leading publishers Houghton Mifflin containing Science-related topic simulations for K to 6 students	Houghton Mifflin Science: Discover! Simulations - Miller_ScienceTechProject
learningscience.org -	Free website tool compiling an	http://new.learningscience

Learning Science	extensive science resources collection for elementary, middle and high school kids .	.org/wp/elementary-school/2nd-grade/structure-and-properties-of-matter/
Welcome Students, Teachers and Parents	Free online tool launched by leading publishers Mcmillan/Mcgraw-Hill containing sample Science-related topic lessons for K to 6 students	Science Grade 2
OLogy: The Science Website for Kids	Free digital Science section of American Museum of Natural History that includes games, stories, videos and ideas for hands-on activities Science related for teachers and students.	https://www.amnh.org/explore/ology/search/(keyword)/endangered
PBS KIDS	Free digital series of videos, games and interactive materials design to positively impact children's lives.	https://pbskids.org/molly/videos
http://www.planetpals.com/	Digital tool compiling interactive resources Earth Science, environmental education, nutricion, world peace including clip art libraries.	Earthday Everyday! Meet the PLANETPALS 1
Project Noah: Citizen Science Platform for Wildlife	Digital platform to identify, research and share about wild animals and plants.	https://www.youtube.com/watch?v=7z9FFk1f7TY&feature=emb_logo
National Geographic Kids	Online interactive magazine with some free features including videos and illustrated articles about the natural world.	Explorer Magazine

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